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Natural Resources Conservation Service In cooperation with the Alaska Soil an Water Conservation District; CIRI; Homer Soil and Water Conservation District; Kenai Natives Association, Inc.; Kenai Peninsula Borough; Kenai Soil and Water Conservation District: Ninilchik Native Association. Inc.; Salamatof Native Association, Inc.; The Nature Conservancy; and the University of Alaska Fairbanks, Agriculture and Forestry Experiment Station

# Soil Survey of Western Kenai Peninsula Area, Alaska



# **How To Use This Soil Survey**

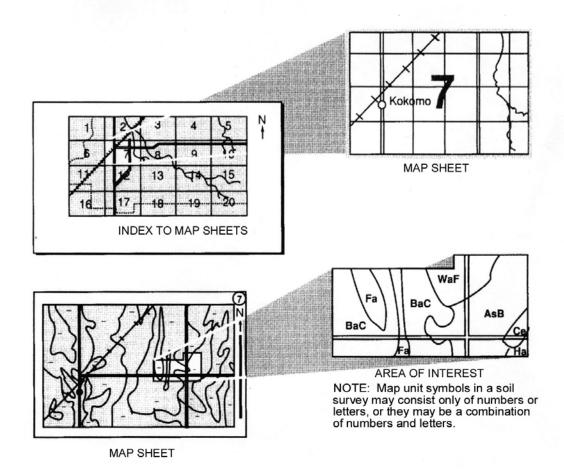
## **Detailed Soil Maps**

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural and Forestry Experiment Station, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 2003. Soil names and descriptions were approved in 2004. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2004. This survey was made cooperatively by the Natural Resources Conservation Service and the Alaska Soil an Water Conservation District; CIRI; Homer Soil and Water Conservation District; Kenai Natives Association, Inc.; Kenai Peninsula Borough; Kenai Soil and Water Conservation District; Ninilchik Native Association, Inc.; Salamatof Native Association, Inc.; The Nature Conservancy; and the University of Alaska Fairbanks, Agriculture and Forestry Experiment Station. This survey is part of the technical assistance furnished through the Homer Soil and Water Conservation District and the Kenai Soil and Water Conservation District.

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**Cover:** Kenai River at Soldotna. The Kenai River is incised in gravelly alluvial deposits that comprise Soldotna soils. The Kenai Mountain range is in the background.

Additional information about the nation's natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is http://www.nrcs.usda.gov.

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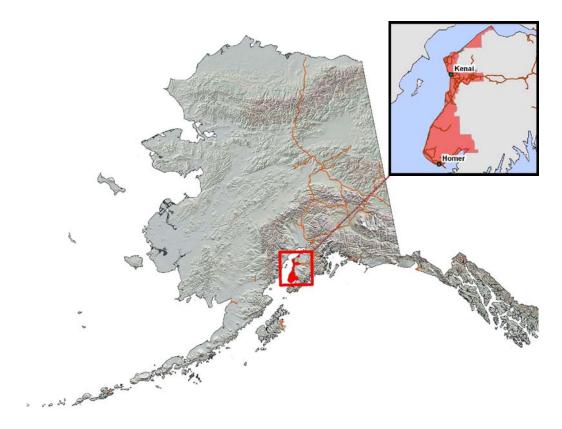


Figure 1. Location of the Western Kenai Peninsula Area in Alaska.

# **Foreword**

This soil survey contains information that can be used in land-planning programs in the Western Kenai Peninsula Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Government agencies, community officials, Alaska Native tribes, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

Many soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the Homer and Kenai offices of the Natural Resources Conservation Service or at Alaska Cooperative Extension.

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# Western Kenai Peninsula Area, Alaska

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# Introduction

The Soil Survey of the Western Kenai Peninsula Area, Alaska is an update of the Soil Survey of the Kenai-Kasilof Area, Alaska (Soil Survey Division Staff 1958) and the Soil Survey of the Homer-Ninilchik Area, Alaska (Soil Survey Division Staff 1971). A number of published and unpublished soils investigations have been incorporated into this updated survey, including: Soil Survey of Homer, Alaska (Soil Survey Division Staff 1969), Soil Survey of North Kenai Area (Soil Survey Division Staff 1982), Soils of the Deep Creek Area, Alaska (Soil Survey Division Staff 1984), Soils of the Fox River Valley Area, Alaska (Soil Survey Division Staff 1985), Kenai River Cooperative River Basin Study (Soil Survey Division Staff 1994). In addition, areas previously not surveyed have been included.

The primary purpose of the original surveys was to provide soils information for agricultural land uses. Soil material differences below 30 inches, which normally do not influence agronomic interpretations, were not clearly separated. Since publication of those surveys, the western Kenai Peninsula area experienced significant population growth and localized urbanization. In the 1990's, a major epidemic of Spruce bark beetle (*Dendroctonus rufipennis*) destroyed hundreds of thousands of acres of spruce forest. As a result, the need for additional soils information and non-agricultural interpretations has increased proportionately.

A major purpose of this updated survey is to provide interpretations for urban land uses that take into account characteristics and properties of subsoil materials. Soils were examined to a depth of 60 inches and separated based on subsoil differences. Each soil was correlated to an ecological site to provide data and interpretations on vegetation succession, forestry, livestock grazing, and wildlife habitat. Map unit descriptions, interpretation tables, and soil maps at a scale of 1:25,000 are provided for the entire survey area.

The Western Kenai Peninsula Area is 894,793 acres of lowlands, hills, and mountains in the Kenai Lowlands and Kenai Mountains of Southcentral Alaska (Figure 1). The survey area is bounded on the east by the Kenai National Wildlife

Refuge, on the south by Kachemak Bay, on the west by Cook Inlet, and on the north by Turnagain Arm of Cook Inlet. Elevation ranges from sea level to 3,350 feet in the Kenai Mountains.

The survey area lies entirely within the Kenai Peninsula Borough and the soil and water conservation districts of Homer and Kenai. Principal centers of population include Anchor Point, Homer, Kenai, Nikiski, Nikolaevsk, Ninilchik, Soldotna, and Sterling.

# **General Nature of the Survey Area**

#### Climate

The climate of the Western Kenai Peninsula is transitional maritime-continental, characterized by long cool winters and short warm summers. Long-term climatic data for two stations in the area, Homer and Kenai, are provided in tables 1 through 6. At Homer on Kachemak Bay, maritime influences are more evident and winter temperatures are relatively moderate. At Kenai, approximately 65 miles to the north, continental influences are stronger and winter temperatures are more extreme.

The Kenai Mountains and Aleutian Range have substantial influence on the climate of the survey area. The Kenai Mountains form a partial barrier against moist oceanic air moving in from the Gulf of Alaska and Prince William Sound. Most of the precipitation carried by weather systems originating in the Gulf falls on the windward slopes of the Kenai Mountains. The area is directly exposed to moist oceanic air moving up Cook Inlet from the southwest. The southern end of the Peninsula and higher elevations receive the highest amount of precipitation. The Aleutian Range to the west provides a partial barrier to cold air from interior Alaska.

Average monthly temperatures during the summer are similar for Homer and Kenai (Tables 1 and 2). For July, the average is 54.1°F (12.3 °C) at the Homer airport and 54.9 °F (12.7 °C) at the Kenai airport. Daily high temperatures in summer rarely exceed 80 °F (26.7 °C) at either location. Daily minimum temperatures in summer are generally between 43 and 47 °F (6.1 and 8.3 °C) at both locations.

Average monthly temperatures during winter are significantly higher in Homer compared to Kenai. For January, the Homer average is 23.4 °F (-4.8 °C) and the Kenai average is 13 °F (-10.6 °C). Persistent high pressure may dominate the region for several days or weeks during winter, bringing relatively cold temperatures to the area. Low temperatures of -20 °F (-28.9 °C) or less occur in Kenai during most winters.

Frost-free season data are given in table 3 for Homer and table 4 for Kenai. The number of continuous days during which the temperature does not drop below specified thresholds is given in tables 5 and 6. The threshold temperatures are 32 °F (0 °C), 28 °F (-2.2 °C) and 24 °F (-4.4 °C). The data in these tables are based on records from 1971 through 2000 for both the Homer and Kenai recording stations.

## Geological deposits of commercial value.

Large deposits of gravel and sand, suitable for road fill or concrete mix, occur throughout most of the survey area north of Anchor Point. Large peat deposits are common in bogs and fens (Plate 7), but these have not been utilized on a commercial scale. There are commercial quantities of diatomaceous earth in small deposits north of Kenai but they have never been used commercially. (Plafker 1956)

#### Water Resources

Water resources of the Western Kenai Peninsula Area include an intricate and extensive network of glacial rivers and non-glacial streams; numerous lakes, ponds,

and other wetlands; and underground aquifers. The Kenai, Kasilof, and Anchor Rivers are the principal rivers in the area. The Kenai and Kasilof Rivers originate from large glaciers in the Kenai Mountains. Many non-glacial streams, such as Funny River, Ninilchik River, and Deep Creek drain the surrounding uplands. Lakes are numerous throughout the northern half of the survey area. Extensive bogs, fens, and other wetlands are found throughout the survey area. Large meltwater channels once flowed from the terminus of glaciers and are now occupied by small underfit streams and organic soils.

Most of the water used on the peninsula is obtained from unconsolidated aquifers made up of complexly interlayered deposits of glacial, outwash, fluvial, lacustrine, and eolian origins. The composition and hydrologic properties of these deposits differ greatly over short horizontal and vertical distances. Thus, the depth, yields, water levels, and water quality of closely spaced wells vary.

# **Native Vegetation**

Native vegetation across most of the Western Kenai Peninsula is needleleaf, broadleaf, and mixed forests. South of Tustumena Lake, the forest is dominated by Lutz spruce (*Picea ×lutzii*), a naturally occurring hybrid between coastal Sitka spruce (*P. sitchensis*) and inland white spruce (*P. glauca*). North of Tustumena Lake, the forest is dominated by differing combinations of Lutz spruce, white spruce, paper birch (*Betula papyrifera*), and quaking aspen (*Populus tremuloides*). In the north, black spruce (*Picea mariana*) is common in areas burned by wildfire. Balsam popular (*Populus balsamifera* ssp. *balsamifera and P. b.* ssp. *trichocarpa*) is common, as is alder (*Alnus* spp.) and willow (*Salix* spp.) scrub, on floodplains and stream terraces throughout the survey area. The forest understory in the south is dominated largely by species characteristic of the coastal temperate forests. To the north, these species are gradually replaced by species characteristic of the inland forests of the Susitna Basin.

Since the mid-1970s, Lutz spruce, white spruce, and mixed spruce-broadleaf forest have been ravaged by spruce bark beetles (*Dendroctonus rufipennis*). The infestation has killed the vast majority of medium- and large-diameter spruce trees across the Kenai Peninsula. Extensive areas have been clear-cut and selectively logged to salvage trees, reduce potential build up of fuels and fire danger, minimize danger to structures and people from falling trees, and promote forest regeneration. Spruce bark beetles are a naturally occurring forest insect.

Within increasing elevation in the Caribou Hills, Bald Mountain, and Ninilchik Dome in the southern part of the survey area, forest vegetation is gradually replaced by a mosaic of white spruce woodland and open forest, subapline grasslands, and alder and willow scrub. Alpine dwarf scrub and lichen dominated communities are of limited extent at the highest elevations in the Caribou Hills. Throughout the forested and subapline zones are extensive poorly drained peatlands dominated by stunted black spruce, willow, ericaceous shrubs, sedges and other hydrophytic plants, and sphagnum moss. Halophytic sedge meadows occupy the upper tidal zone, particularly in the Fox River Flats in upper Kachemak Bay, and stands of beach wildrye (*Elymus mollis*) help stabilized beach dunes in many places along the coast.

# **Population**

According to the 1990 U.S. Census, the population of the Kenai Peninsula Borough was 40,802. The population increased to 49,691 in 2000. Most of the population centers of the Borough are within the boundaries of the survey area.

Outside the major cities and towns, the population of the Western Kenai Peninsula Area is sparse and widely distributed. Most rural residents live on or near the road system. Several large tracts of land in the northern part of the survey area and the Caribou Hills have few, if any, roads and are very sparsely settled. A substantial

number of homesteads, lodges, and recreational cabins are scattered throughout these remote areas.

# **How This Survey Was Made**

This soil survey is a compilation and update of soil surveys and investigations done from the 1950s through the 1980s and includes both remapping the older surveys and mapping of previously unmapped areas. The published soil surveys and unpublished soil investigations were evaluated to determine if mapping and interpretations were adequate for current and projected land uses and soils information needs. Areas where deficiencies existed were then targeted for remapping and additional data collection. Relevant references and other information on climate, geology, geomorphology, hydrology, and vegetation of the area were researched.

Black-and-white aerial photography, at a scale of 1:25,000, acquired in 1996 was used for mapping. The existing soil surveys, reference information, and new photography were studied in detail to determine general soil-landform and soil-vegetation relationships. Potential users of the survey provided input at public meetings, which helped define survey objectives, procedures, and interpretative needs. Field work for the soil survey was conducted between 1995 and 2003.

# Mapping Intensity

The level of mapping intensity and amount of required fieldwork were determined by the anticipated intensity of land use, accessibility, and the reliability of the existing mapping. Remote areas such as the mountains around Bradley Lake, Caribou Hills, and the extreme northern part of the survey area were mapped at a level of intensity that provides general knowledge of the soils and vegetation. The City of Homer, the Fox River Valley, and a half-mile wide corridor from the mouth of the Kenai River to the Kenai National Wildlife Refuge boundary has been previously mapped in high detail. Little additional fieldwork was necessary in these areas. Small map unit delineations were combined into larger units that correlate with current concepts.

# **Field Data Collection**

Field mapping and data collection were accomplished by traversing the landscape and running detailed transects in representative delineations of soil map units. During the traverse, soil pits were dug on landform positions, soil profile characteristics were described, and map unit boundaries were noted. Detailed soil and vegetation descriptions were collected at representative sites.

Detailed soil-vegetation transects were run across selected delineations of each map unit. Each transect consisted of one to ten or more data collection stops, depending on the size of the delineation and complexity of the map unit. Stops were spaced at predetermined, paced intervals or by sampling representative landform positions. Detailed data on soils and vegetation were collected at most stops. Corresponding data and notes were linked to map units using common transect and stop numbers. All traverse and transect locations were plotted on the back of the aerial photographs for permanent record and later reference during map preparation and data analysis. The global positioning system (GPS) coordinates for each stop is part of the digital database for the survey area.

The number of transects in each map unit was determined by the intensity of mapping, data needs, and accessibility. Map units with large acreage have many transects. Most map units are documented by at least two transects.

#### Soils Data Collection

During traverses and transects, data on landscape characteristics and soil properties were collected and field observations were recorded. Landscape characteristics included slope, depth to water table, and landform; soil properties included soil horizons, texture, rock fragments, and reaction. Soil descriptions were completed using standard guidelines, codes, and terminology provided in the *National Soil Survey Handbook* (USDA 1996) and *Soil Survey Manual* (Soil Survey Division Staff 1993).

After describing the soils in the survey area and determining their properties, the soils were assigned to taxonomic classes (units) (*Soil Taxonomy* (Soil Survey Staff 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff 1998)). After classifying and naming the soils in the survey area, they can be compared with similar soils in the same taxonomic class in other areas to confirm properties and standardize technical nomenclature, thereby providing a basis for the transfer of soils information.

Taxonomic classes are concepts, with each taxonomic class having a set of soil characteristics with precisely defined limits. However, these limits are artificial and often do not correspond with the natural range of soil properties as they occur in the field. In the detailed map unit descriptions in this report full ranges in properties are described for the soil component as it is observed on the landscape.

While the soil survey was in progress, samples of representative soils were collected for laboratory analyses and engineering tests. These data, together with the observed soil characteristics and properties, were used to predict the expected behavior of the soils under different land uses.

# **Vegetation Data Collection**

Detailed vegetation data were collected for most traverses and transects. Types of data included vegetation type; stand structure and species cover; age, diameter, and height of site trees; and current annual production of vascular plants. On most transects, data were collected in at least one stand in each major vegetation type. Not all types of data were collected in each stand.

Data were collected within an area of the stand approximately centered on the soil pit. The size of the sample area was variable but encompassed an area large enough to encounter all species in the stand and adequately represent the variability within the stand. Canopy cover by species of vascular plants and total moss, total lichen, and other ground cover was visually estimated to the nearest 5 percent (nearest 1 percent when cover was less than 7 percent). Total basal area of trees was measured using angle gauges.

Site trees were selected from dominant and codominant trees that were free of major defects and disease. Age and diameter were measured at breast height, approximately 4.5 feet (1.4 m) above the base. Age was determined from cores extracted with an increment borer. Total height was measured using horizontal distance and percent scale techniques.

Current annual production data were collected in typical or representative areas of the stand using a modified double sampling technique. Production data were collected in most unforested vegetation types and in forest vegetation types suitable for livestock grazing.

All soils and vegetation field data were entered into Alaska Soil Survey Field Database for management and analysis.

# **Detailed Soil Map Units**

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

Map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class, there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called non-contrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Map units that consist of one major component are called *consociations*. Beluga silt loam, 0 to 4 percent slopes is an example.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The

pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Cohoe-Nikolai complex, hilly is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Kenai-Starichkof association, 0 to 25 percent slopes is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Killey and Moose River soils is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Gravel pits is an example.

Table 7 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

# 501—Aquic Cryofluvents, 0 to 2 percent slopes

Elevation: 0 to 115 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

# Aquic Cryofluvents and similar soils

Extent: 75 to 95 percent of the map unit

Landform: alluvial fans on alluvial flats, channels on alluvial flats

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: coarse-loamy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—28 inches; June-Sept.—28 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, high permeability Cq1—6 to 31 inches; silt loam, high permeability

Cg2—31 to 48 inches; stratified silt loam to fine sandy loam to sand, high permeability

2Cg3—48 to 60 inches; gravelly sand, high permeability

#### **Minor Components**

Susitna and similar soils: 0 to 20 percent of the map unit Moose River and similar soils: 0 to 15 percent of the map unit

# 502—Aquic Cryofluvents, shallow, 0 to 2 percent slopes

Elevation: 0 to 328 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Aquic Cryofluvents, shallow, and similar soils

Extent: 75 to 90 percent of the map unit

Landform: channels on alluvial flats, alluvial fans on alluvial flats

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: coarse-loamy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—28 inches; June-Sept.—28 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 5.4 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A-2 to 6 inches; silt loam, high permeability

Cg1—6 to 19 inches; stratified silt loam to fine sandy loam to sand, high

permeability

2Cg2—19 to 60 inches; gravelly sand, high permeability

#### **Minor Components**

Niklason and similar soils: 0 to 25 percent of the map unit Moose River and similar soils: 0 to 10 percent of the map unit

## 503—Badland, sea cliffs

Elevation: 0 to 492 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

# Badland, sea cliffs

Extent: 100 percent of the map unit

Landform: cliffs

Slope range: 100 to 200 percent

# 504—Badland, sea cliffs-Typic Cryorthents complex, very steep

Elevation: 0 to 492 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Badland, sea cliffs

Extent: 40 to 70 percent of the map unit

Landform: cliffs

Slope range: 100 to 200 percent

## Typic Cryorthents and similar soils

Extent: 30 to 60 percent of the map unit

Landform: sea cliffs

Position on slope: backslopes

Slope shape: concave

Slope range: 45 to 150 percent

Parent material: debris slide deposits derived from interbedded sedimentary rock Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

#### 505—Beaches

Elevation: 0 to 33 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### **Beaches**

Extent: 80 to 100 percent of the map unit

Landform: beaches

Slope range: 1 to 6 percent

#### **Minor Components**

Beaches, tidal flats: 0 to 20 percent of the map unit

# 506—Beluga silt loam, 0 to 4 percent slopes

Elevation: 16 to 410 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Beluga and similar soils

Extent: 80 to 95 percent of the map unit

Landform: alluvial fans Position on slope: toeslopes

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—8 inches; June-Sept.—8 to 15

inches Ponding: rare

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability

A—5 to 7 inches; silt loam, moderately high permeability Cq1—7 to 32 inches; silt loam, moderately high permeability

2Cg2-32 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Slikok and similar soils: 0 to 10 percent of the map unit Smokey Bay and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 10 percent of the map unit

# 507—Beluga silt loam, 4 to 8 percent slopes

Elevation: 16 to 1,148 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Beluga and similar soils

Extent: 85 to 90 percent of the map unit

Landform: alluvial fans

Position on slope: footslopes, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability

A—5 to 7 inches; silt loam, moderately high permeability Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Smokey Bay and similar soils: 5 to 15 percent of the map unit Slikok and similar soils: 0 to 5 percent of the map unit

# 508—Beluga silt loam, 8 to 15 percent slopes

Elevation: 131 to 951 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

# Beluga and similar soils

Extent: 85 to 90 percent of the map unit

Landform: alluvial fans

Position on slope: backslopes, footslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high

permeability

A—5 to 7 inches; silt loam, moderately high permeability Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Smokey Bay and similar soils: 5 to 15 percent of the map unit Slikok and similar soils: 0 to 5 percent of the map unit

# 509—Beluga-Mutnala complex, 0 to 8 percent slopes

Elevation: 16 to 328 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

# Beluga and similar soils

Extent: 35 to 60 percent of the map unit

Landform: alluvial fans
Position on slope: toeslopes

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high

permeability

A—5 to 7 inches; silt loam, moderately high permeability Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

#### Mutnala and similar soils

Extent: 35 to 60 percent of the map unit

Landform: moraines on till plains Position on slope: summits Slope shape: convex

Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Starichkof and similar soils: 0 to 10 percent of the map unit

# 510—Beluga-Smokey Bay complex, 4 to 8 percent slopes

Elevation: 16 to 623 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

#### Beluga and similar soils

Extent: 50 to 70 percent of the map unit

Landform: alluvial fans

Position on slope: footslopes, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: silty and clavey slope alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high

permeability

A—5 to 7 inches; silt loam, moderately high permeability Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

# Smokey Bay and similar soils

Extent: 30 to 50 percent of the map unit

Landform: alluvial fans
Position on slope: shoulders

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: high

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A—2 to 9 inches; silt loam, moderately high permeability

Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability

Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

#### **Minor Components**

Slikok and similar soils: 0 to 5 percent of the map unit

# 511—Beluga-Smokey Bay complex, 8 to 15 percent slopes

Elevation: 66 to 623 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Beluga and similar soils

Extent: 45 to 60 percent of the map unit

Landform: alluvial fans

Position on slope: backslopes, footslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty and clavey slope alluvium

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high

permeability

A—5 to 7 inches; silt loam, moderately high permeability Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

# **Smokey Bay and similar soils**

Extent: 40 to 50 percent of the map unit

Landform: alluvial fans Position on slope: shoulders

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water-severe; by wind-severe

Runoff: high

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A—2 to 9 inches; silt loam, moderately high permeability

Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability

Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

#### **Minor Components**

Slikok and similar soils: 0 to 5 percent of the map unit

# 512—Benka silt loam, 0 to 4 percent slopes

Elevation: 148 to 656 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Benka and similar soils

Extent: 60 to 90 percent of the map unit

Landform: outwash plains Position on slope: backslopes

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

#### **Minor Components**

Doroshin and similar soils: 0 to 10 percent of the map unit Kalifonsky and similar soils: 0 to 30 percent of the map unit

# 513—Benka silt loam, 4 to 8 percent slopes

Elevation: 197 to 1,427 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### Benka and similar soils

Extent: 75 to 95 percent of the map unit

Landform: outwash plains Position on slope: backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

## **Minor Components**

Iliamna and similar soils: 0 to 10 percent of the map unit Kalifonsky and similar soils: 0 to 15 percent of the map unit

# 514—Benka silt loam, 8 to 15 percent slopes

Elevation: 180 to 1.230 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

#### Benka and similar soils

Extent: 85 to 90 percent of the map unit

Landform: outwash plains Position on slope: backslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

# **Minor Components**

Qutal and similar soils: 0 to 10 percent of the map unit Tlikakila and similar soils: 0 to 10 percent of the map unit

# 515—Benka silt loam, 15 to 25 percent slopes

Elevation: 115 to 1,050 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Benka and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

#### **Minor Components**

Chulitna and similar soils: 0 to 15 percent of the map unit Kalifonsky and similar soils: 0 to 15 percent of the map unit

# 516—Benka silt loam, 25 to 60 percent slopes

Elevation: 0 to 1,148 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 90 to 120 days

#### Benka and similar soils

Extent: 90 to 95 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 25 to 60 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

# **Minor Components**

Tlikakila and similar soils: 0 to 10 percent of the map unit

# 517—Benka silt loams, strongly sloping and gently sloping

Elevation: 246 to 361 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

#### Benka, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: outwash plains Position on slope: backslopes

Slope shape: linear

Slope range: 9 to 15 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

### Benka, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: outwash plains

Position on slope: summits, toeslopes, shoulders

Slope shape: convex Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability B—5 to 30 inches; silt loam, moderately high permeability

2C-30 to 60 inches; stratified coarse sand to fine sand, high permeability

#### **Minor Components**

Qutal and similar soils: 5 to 10 percent of the map unit Tlikakila and similar soils: 0 to 10 percent of the map unit

# 518—Boxcar silt loam, 0 to 8 percent slopes

Elevation: 902 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Boxcar and similar soils

Extent: 65 to 85 percent of the map unit Landform: kame moraines, lateral moraines

Slope shape: convex Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C-20 to 60 inches; extremely cobbly loamy fine sand, high permeability

## **Minor Components**

Tokositna and similar soils: 0 to 25 percent of the map unit Tuxedni and similar soils: 0 to 15 percent of the map unit

# 519—Boxcar silt loam, 8 to 25 percent slopes

Elevation: 1,148 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### Boxcar and similar soils

Extent: 75 to 85 percent of the map unit Landform: lateral moraines, kame moraines

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C-20 to 60 inches; extremely cobbly loamy fine sand, high permeability

#### **Minor Components**

Tokositna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 5 to 15 percent of the map unit

# 520—Boxcar silt loam, 25 to 60 percent slopes

Elevation: 984 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### **Boxcar and similar soils**

Extent: 80 to 90 percent of the map unit

Landform: kame moraines, lateral moraines

Slope shape: convex

Slope range: 25 to 60 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C-20 to 60 inches; extremely cobbly loamy fine sand, high permeability

# **Minor Components**

Truuli and similar soils: 5 to 15 percent of the map unit Kachemak and similar soils: 0 to 10 percent of the map unit

# 521—Boxcar silt loam, cool, 0 to 8 percent slopes

Elevation: 1,640 to 2,247 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

# Boxcar, cool, and similar soils

Extent: 75 to 85 percent of the map unit Landform: kame moraines, lateral moraines

Slope shape: convex Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 5 inches; silt loam, high permeability

E,B-5 to 20 inches; very fine sandy loam, high permeability

2C-20 to 60 inches; extremely cobbly loamy fine sand, high permeability

# **Minor Components**

Kachemak, cool, and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 5 to 15 percent of the map unit

# 522—Boxcar silt loam, cool, 25 to 60 percent slopes

Elevation: 1,542 to 2,592 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### Boxcar, cool, and similar soils

Extent: 60 to 85 percent of the map unit Landform: lateral moraines, kame moraines

Slope shape: convex

Slope range: 25 to 60 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C-20 to 60 inches; extremely cobbly loamy fine sand, high permeability

## **Minor Components**

Kachemak, cool, and similar soils: 5 to 25 percent of the map unit Snowdance and similar soils: 5 to 15 percent of the map unit

# 523—Chenega silt loam, 0 to 2 percent slopes

Elevation: 7 to 131 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

#### Chenega and similar soils

Extent: 50 to 95 percent of the map unit

Landform: alluvial fans, flood plains, stream terraces

Slope shape: linear

Slope range: 0 to 2 percent Parent material: gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.9 inches

Representative Profile:

Oi—0 to 4 inches; slightly decomposed plant material, high permeability

A-4 to 7 inches; silt loam, high permeability

C-7 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Riverwash: 5 to 15 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

# 524—Chenega silt loam, cool, 0 to 2 percent slopes

Elevation: 2,231 to 2,379 feet

Mean annual precipitation: 49 to 59 inches

Frost-free period: 75 to 115 days

## Chenega, cool, and similar soils

Extent: 80 to 95 percent of the map unit

Landform: flood plains, stream terraces, alluvial fans

Slope shape: linear

Slope range: 0 to 2 percent Parent material: gravelly alluvium

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.9 inches

Representative Profile:

Oi—0 to 4 inches; slightly decomposed plant material, high permeability

A-4 to 7 inches; silt loam, high permeability

C-7 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Riverwash: 0 to 15 percent of the map unit

# 525—Chenega very fine sandy loam, occasionally flooded, 0 to 2 percent slopes

Elevation: 7 to 98 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

# Chenega, occasionally flooded, and similar soils

Extent: 75 to 95 percent of the map unit

Landform: stream terraces, flood plains, alluvial fans

Slope shape: linear

Slope range: 0 to 2 percent Parent material: gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.9 inches

Representative Profile:

Oi—0 to 4 inches; slightly decomposed plant material, high permeability

A—4 to 7 inches; very fine sandy loam, high permeability C—7 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Riverwash: 5 to 15 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

# 526—Chulitna silt loam, 0 to 4 percent slopes

Elevation: 131 to 722 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Chulitna and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability 2C—33 to 60 inches; loamy sand, high permeability

## **Minor Components**

Benka and similar soils: 0 to 30 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 527—Chulitna silt loam, 4 to 8 percent slopes

Elevation: 82 to 1,575 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Chulitna and similar soils

Extent: 50 to 85 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability 2C—33 to 60 inches; loamy sand, high permeability

## **Minor Components**

Spenard and similar soils: 0 to 20 percent of the map unit Kashwitna and similar soils: 5 to 25 percent of the map unit

# 528—Chulitna silt loam, 8 to 15 percent slopes

Elevation: 230 to 1,657 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Chulitna and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits Slope shape: convex Slope range: 8 to 15 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability 2C—33 to 60 inches; loamy sand, high permeability

## **Minor Components**

Whitsol and similar soils: 5 to 30 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

# 529—Chulitna silt loam, 15 to 25 percent slopes

Elevation: 66 to 1,903 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

#### Chulitna and similar soils

Extent: 80 to 90 percent of the map unit

Landform: terraces on till plains, moraines on till plains

Position on slope: summits Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability 2C—33 to 60 inches; loamy sand, high permeability

# **Minor Components**

Whitsol and similar soils: 0 to 20 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit

# 530—Chunilna mucky silt loam, 0 to 4 percent slopes

Elevation: 115 to 820 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Chunilna and similar soils

Extent: 75 to 95 percent of the map unit

Landform: till plains

Position on slope: toeslopes, footslopes

Slope shape: convex Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability A2,Bg—8 to 18 inches; silt loam, high permeability

2C-18 to 60 inches; very gravelly sandy loam, moderately high permeability

## **Minor Components**

Tuxedni and similar soils: 0 to 20 percent of the map unit Doroshin and similar soils: 0 to 5 percent of the map unit

# 531—Chunilna mucky silt loam, 4 to 8 percent slopes

Elevation: 66 to 1,640 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Chunilna and similar soils

Extent: 70 to 85 percent of the map unit

Landform: till plains

Position on slope: footslopes, toeslopes

Slope shape: convex Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability A2,Bg—8 to 18 inches; silt loam, high permeability

2C-18 to 60 inches; very gravelly sandy loam, moderately high permeability

#### **Minor Components**

Tuxedni and similar soils: 5 to 20 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 532—Chunilna mucky silt loam, cool, 0 to 8 percent slopes

Elevation: 787 to 2.001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Chunilna, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: toeslopes, footslopes

Slope shape: convex Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability A2,Bg—8 to 18 inches; silt loam, high permeability

2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

## **Minor Components**

Tokositna and similar soils: 0 to 15 percent of the map unit Doroshin and similar soils: 0 to 15 percent of the map unit

# 533—Chunilna mucky silt loam, cool, 8 to 25 percent slopes

Elevation: 591 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Chunilna, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: footslopes, toeslopes

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Floodina: none

Depth to high water table (approximate): April-Sept.—18 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability A2.Bq—8 to 18 inches; silt loam, high permeability

2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

## **Minor Components**

Tokositna and similar soils: 0 to 20 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 534—Clam Gulch silt loam, 0 to 4 percent slopes

Elevation: 3 to 315 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

#### Clam Gulch and similar soils

Extent: 70 to 90 percent of the map unit Landform: depressions on till plains

Position on slope: toeslopes Slope shape: concave Slope range: 0 to 4 percent

Parent material: silty loess over silty and clayey glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 16.3 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A-3 to 15 inches; silt loam, high permeability

2Cg-15 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Doroshin and similar soils: 0 to 15 percent of the map unit Kenai and similar soils: 0 to 10 percent of the map unit Slikok and similar soils: 0 to 15 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 535—Clunie peat, 0 to 2 percent slopes

Elevation: 3 to 98 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Clunie and similar soils

Extent: 85 to 95 percent of the map unit

Landform: tidal flats Slope shape: linear

Slope range: 0 to 2 percent

Parent material: herbaceous organic material over silty and clayey marine deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—0 inches

Ponding: frequent

Available water capacity (approximate): 13.6 inches

Representative Profile:

Oi—0 to 33 inches; peat, high permeability

2Cg-33 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Typic Cryaquents and similar soils: 0 to 15 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 536—Coal Creek silt loam, 0 to 4 percent slopes

Elevation: 16 to 1,542 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

#### Coal Creek and similar soils

Extent: 70 to 85 percent of the map unit

Landform: till plains, depressions on stream terraces

Slope shape: concave Slope range: 0 to 4 percent

Parent material: colluvium and/or eolian deposits over drift

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.7 inches

Representative Profile:

Oi—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 15 inches; silt loam, moderately high permeability Cg1—15 to 23 inches; silt loam, moderately high permeability

2Cg2—23 to 60 inches; gravelly silt loam, moderately high permeability

## **Minor Components**

Cohoe and similar soils: 0 to 15 percent of the map unit Naptowne and similar soils: 0 to 15 percent of the map unit Slikok and similar soils: 0 to 10 percent of the map unit

# 537—Coal Creek silt loam, 4 to 8 percent slopes

Elevation: 16 to 1.673 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

#### Coal Creek and similar soils

Extent: 60 to 90 percent of the map unit Landform: depressions on till plains Position on slope: toeslopes, footslopes

Slope shape: concave Slope range: 4 to 8 percent

Parent material: colluvium and/or eolian deposits over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.7 inches

Representative Profile:

Oi-0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 15 inches; silt loam, moderately high permeability Cg1—15 to 23 inches; silt loam, moderately high permeability

2Cg2-23 to 60 inches; gravelly silt loam, moderately high permeability

## **Minor Components**

Starichkof and similar soils: 0 to 25 percent of the map unit Mutnala and similar soils: 0 to 20 percent of the map unit

# 538—Coal Creek silt loam, 8 to 15 percent slopes

Elevation: 16 to 1,476 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

#### Coal Creek and similar soils

Extent: 65 to 90 percent of the map unit Landform: depressions on till plains Position on slope: footslopes, toeslopes

Slope shape: concave Slope range: 8 to 15 percent

Parent material: colluvium and/or eolian deposits over drift

Hazard of erosion (organic mat removed): by water-severe; by wind-slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.7 inches

Representative Profile:

Oi—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 15 inches; silt loam, moderately high permeability Cg1—15 to 23 inches; silt loam, moderately high permeability

2Cg2-23 to 60 inches; gravelly silt loam, moderately high permeability

## **Minor Components**

Qutal and similar soils: 5 to 25 percent of the map unit Doroshin and similar soils: 0 to 15 percent of the map unit

# 539—Cohoe silt loam, 0 to 4 percent slopes

Elevation: 49 to 1,460 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### Cohoe and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Spenard and similar soils: 5 to 25 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

## 540—Cohoe silt loam, 4 to 8 percent slopes

Elevation: 16 to 1,345 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### Cohoe and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

# **Minor Components**

Spenard and similar soils: 5 to 25 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 541—Cohoe silt loam, 8 to 15 percent slopes

Elevation: 98 to 1,640 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### Cohoe and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 542—Cohoe silt loam, 15 to 25 percent slopes

Elevation: 82 to 1,476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### Cohoe and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit

## 543—Cohoe silt loam, 25 to 45 percent slopes

Elevation: 33 to 1,378 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 115 days

# Cohoe and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

# **Minor Components**

Kichatna and similar soils: 5 to 15 percent of the map unit Mutnala and similar soils: 5 to 15 percent of the map unit

# 544—Cohoe silt loam, 45 to 60 percent slopes

Elevation: 16 to 919 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

#### Cohoe and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 45 to 60 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

# **Minor Components**

Kichatna and similar soils: 10 to 35 percent of the map unit Truuli and similar soils: 0 to 5 percent of the map unit

# 545—Cohoe silt loam, dry, 0 to 4 percent slopes

Elevation: 66 to 328 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Cohoe, dry, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## **Minor Components**

Spenard and similar soils: 5 to 25 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 546—Cohoe silt loam, dry, 4 to 8 percent slopes

Elevation: 3 to 410 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Cohoe, dry, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains
Position on slope: backslopes

Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC-24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## **Minor Components**

Spenard and similar soils: 5 to 25 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 547—Cohoe silt loam, dry, 8 to 15 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 130 days

# Cohoe, dry, and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 548—Cohoe silt loam, dry, 15 to 25 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Cohoe, dry, and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

# **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit

# 549—Cohoe silt loam, dry, 25 to 45 percent slopes

Elevation: 66 to 407 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Cohoe, dry, and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B-2 to 24 inches; silt loam, high permeability

2BC-24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Kichatna and similar soils: 5 to 15 percent of the map unit Naptowne and similar soils: 5 to 15 percent of the map unit

# 550—Cohoe silt loam, dry, 45 to 60 percent slopes

Elevation: 82 to 262 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 105 days

#### Cohoe, dry, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 45 to 60 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## **Minor Components**

Kichatna and similar soils: 10 to 35 percent of the map unit Truuli and similar soils: 0 to 5 percent of the map unit

# 551—Cohoe silt loams, moderately steep and gently sloping

Elevation: 82 to 574 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

## Cohoe, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains
Position on slope: backslopes

Slope shape: convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Pondina: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## Cohoe, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, toeslopes

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## **Minor Components**

Qutal and similar soils: 5 to 15 percent of the map unit Slikok and similar soils: 0 to 10 percent of the map unit

# 552—Cohoe silt loams, dry, moderately steep and gently sloping

Elevation: 148 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Cohoe, dry, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes Slope shape: linear, convex Slope range: 11 to 20 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## Cohoe, dry, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, toeslopes, summits

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### **Minor Components**

Qutal and similar soils: 5 to 15 percent of the map unit Slikok and similar soils: 0 to 10 percent of the map unit

# 553—Cohoe-Kenai complex, 8 to 15 percent slopes

Elevation: 98 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Cohoe, dry, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains
Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

## Kenai and similar soils

Extent: 20 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Clam Gulch and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit Soldotna and similar soils: 0 to 10 percent of the map unit

# 554—Cohoe-Kenai complex, 15 to 25 percent slopes

Elevation: 115 to 410 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Cohoe, dry, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains
Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### Kenai and similar soils

Extent: 20 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Clam Gulch and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit Soldotna and similar soils: 0 to 10 percent of the map unit

# 555—Cohoe-Nikolai complex, hilly

Elevation: 3 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Cohoe, dry, and similar soils

Extent: 65 to 75 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 6 to 30 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed); by water—severe: by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### Nikolai and similar soils

Extent: 25 to 35 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 12 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial

deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability
Oa—2 to 32 inches; muck, moderately high permeability
2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2—41 to 60 inches; loamy sand, very high permeability

## 556—Cohoe-Nikolai complex, undulating to rolling

Elevation: 3 to 344 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### Cohoe, dry, and similar soils

Extent: 65 to 75 percent of the map unit

Landform: moraines on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 3 to 16 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability 2BC—24 to 52 inches; silt loam, high permeability

3C-52 to 60 inches; very gravelly sandy loam, high permeability

#### Nikolai and similar soils

Extent: 25 to 35 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial

deposits

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability Oa—2 to 32 inches; muck, moderately high permeability 2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2-41 to 60 inches; loamy sand, very high permeability

# 557—Cytex Creek silt loam, 4 to 15 percent slopes

Elevation: 1,083 to 1,804 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Cytex Creek and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: footslopes, toeslopes, summits

Slope shape: concave Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—16 to 24 inches; June-Sept.—16

inches Ponding: none

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E-2 to 3 inches; silt loam, high permeability

Bs—3 to 7 inches; very fine sandy loam, high permeability Bw—7 to 31 inches; fine sandy loam, high permeability

2C-31 to 60 inches; very cobbly loamy sand, high permeability

## **Minor Components**

Nikolaevsk and similar soils: 5 to 25 percent of the map unit Tokositna and similar soils: 5 to 15 percent of the map unit

# 558—Doroshin mucky peat, 0 to 4 percent slopes

Elevation: 3 to 1,919 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

#### Doroshin and similar soils

Extent: 50 to 90 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability 2Cg—36 to 60 inches; silt loam, moderately high permeability

#### **Minor Components**

Starichkof and similar soils: 5 to 25 percent of the map unit Slikok and similar soils: 5 to 25 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 559—Doroshin mucky peat, 4 to 8 percent slopes

Elevation: 16 to 1,968 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

#### Doroshin and similar soils

Extent: 75 to 95 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability 2Cg—36 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Starichkof and similar soils: 0 to 25 percent of the map unit Slikok and similar soils: 0 to 5 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 560—Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes

Elevation: 1,673 to 2,707 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

# Dystrocryepts and similar soils

Extent: 40 to 60 percent of the map unit Landform: hills, moraines on till plains

Slope shape: convex

Slope range: 4 to 25 percent

Parent material: ash-influenced gravelly glaciofluvial deposits over sandy and gravelly

glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 2.3 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability A—2 to 7 inches; very gravelly fine sandy loam, high permeability

Bw—7 to 23 inches; extremely gravelly loamy sand, high permeability

C-23 to 60 inches; extremely gravelly sand, high permeability

# Typic Cryorthents and similar soils

Extent: 20 to 40 percent of the map unit Landform: moraines on till plains, hills

Slope shape: convex

Slope range: 15 to 35 percent

Parent material: sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2-33 to 60 inches; very gravelly silt loam, moderately high permeability

#### Iliamna, cool, and similar soils

Extent: 10 to 30 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 4 to 25 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high

permeability

E,B—2 to 29 inches; silt loam, high permeability

2C-29 to 60 inches; loamy fine sand, high permeability

# 561—Foreland peat, 0 to 4 percent slopes

Elevation: 3 to 1,378 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

#### Foreland and similar soils

Extent: 70 to 85 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 0 to 4 percent Parent material: sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 4.3 inches

Representative Profile:

O—0 to 13 inches; peat, high permeability A—13 to 19 inches; sand, high permeability Cg—19 to 60 inches; sand, high permeability

## **Minor Components**

Truuli and similar soils: 0 to 20 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 562—Foreland-Starichkof-Soldotna complex, undulating

Elevation: 49 to 591 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

#### Foreland and similar soils

Extent: 40 to 65 percent of the map unit

Landform: outwash plains Slope shape: linear

Slope range: 0 to 4 percent Parent material: sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 4.3 inches

Representative Profile:

O—0 to 13 inches; peat, high permeability A—13 to 19 inches; sand, high permeability Cg—19 to 60 inches; sand, high permeability

#### Soldotna and similar soils

Extent: 15 to 30 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

## Starichkof and similar soils

Extent: 15 to 40 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## **Minor Components**

Water, fresh: 0 to 5 percent of the map unit

# 563—Gravel pits

Elevation: 13 to 1.919 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

Pits, gravel

Extent: 85 to 100 percent of the map unit

Landform: outwash plains

#### **Minor Components**

Water, fresh: 0 to 20 percent of the map unit

# 564—Iliamna silt loam, 0 to 4 percent slopes

Elevation: 3 to 1.608 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

#### Iliamna and similar soils

Extent: 60 to 90 percent of the map unit

Landform: plains Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B-2 to 29 inches; silt loam, high permeability

2C-29 to 60 inches; loamy fine sand, high permeability

## **Minor Components**

Benka and similar soils: 5 to 15 percent of the map unit Tlikakila and similar soils: 5 to 25 percent of the map unit

# 565—Iliamna silt loam, 4 to 15 percent slopes

Elevation: 16 to 1,886 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Iliamna and similar soils

Extent: 70 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B-2 to 29 inches; silt loam, high permeability

2C-29 to 60 inches; loamy fine sand, high permeability

## **Minor Components**

Cohoe and similar soils: 8 to 25 percent of the map unit Spenard and similar soils: 2 to 16 percent of the map unit

# 566—Iliamna silt loam, 15 to 45 percent slopes

Elevation: 10 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### lliamna and similar soils

Extent: 60 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high

permeability

E.B-2 to 29 inches; silt loam, high permeability

2C-29 to 60 inches; loamy fine sand, high permeability

# **Minor Components**

Tlikakila and similar soils: 5 to 15 percent of the map unit Cohoe and similar soils: 5 to 25 percent of the map unit

# 567—Iliamna silt loam, cool, 0 to 15 percent slopes

Elevation: 1,542 to 2,133 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

## Iliamna, cool, and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 0 to 15 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B-2 to 29 inches; silt loam, high permeability

2C-29 to 60 inches; loamy fine sand, high permeability

# **Minor Components**

Snowdance and similar soils: 5 to 15 percent of the map unit

# 568—Island silt loam, 0 to 4 percent slopes

Elevation: 16 to 1,722 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

#### Island and similar soils

Extent: 70 to 95 percent of the map unit

Landform: till plains Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability Bw—13 to 24 inches; silt loam, high permeability BC—24 to 33 inches; silt loam, high permeability

2C-33 to 60 inches; gravelly sandy loam, high permeability

#### **Minor Components**

Tuxedni and similar soils: 3 to 25 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 569—Island silt loam, 4 to 8 percent slopes

Elevation: 16 to 755 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Island and similar soils

Extent: 80 to 95 percent of the map unit

Landform: till plains Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability Bw—13 to 24 inches; silt loam, high permeability BC—24 to 33 inches; silt loam, high permeability

2C-33 to 60 inches; gravelly sandy loam, high permeability

#### **Minor Components**

Tuxedni and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 5 percent of the map unit

# 570—Island silt loam, 8 to 15 percent slopes

Elevation: 3 to 820 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Island and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hillslopes on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi-0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability Bw—13 to 24 inches; silt loam, high permeability BC—24 to 33 inches; silt loam, high permeability

2C-33 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Tuxedni and similar soils: 5 to 15 percent of the map unit

# 571—Island silt loam, 15 to 45 percent slopes

Elevation: 33 to 755 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 115 days

#### Island and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hillslopes on till plains Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability Bw—13 to 24 inches; silt loam, high permeability BC—24 to 33 inches; silt loam, high permeability

2C-33 to 60 inches; gravelly sandy loam, high permeability

# **Minor Components**

Tuxedni and similar soils: 5 to 15 percent of the map unit

# 572—Island silt loam, forested, 0 to 8 percent slopes

Elevation: 16 to 1,509 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

# Island, forested, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: till plains Slope shape: linear

Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability Bw—13 to 24 inches; silt loam, high permeability BC—24 to 33 inches; silt loam, high permeability

2C-33 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Tuxedni and similar soils: 3 to 15 percent of the map unit Benka and similar soils: 0 to 15 percent of the map unit

# 573—Kachemak silt loam, 4 to 8 percent slopes

Elevation: 410 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak and similar soils

Extent: 70 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

#### **Minor Components**

Redoubt and similar soils: 5 to 10 percent of the map unit Tuxedni and similar soils: 5 to 25 percent of the map unit

# 574—Kachemak silt loam, 8 to 15 percent slopes

Elevation: 164 to 2,001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 5 to 20 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 575—Kachemak silt loam, 15 to 25 percent slopes

Elevation: 197 to 2,018 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 25 percent of the map unit Tuxedni and similar soils: 5 to 15 percent of the map unit

# 576—Kachemak silt loam, 25 to 35 percent slopes

Elevation: 197 to 2,034 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 25 to 35 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Redoubt and similar soils: 0 to 25 percent of the map unit Tuxedni and similar soils: 5 to 25 percent of the map unit

# 577—Kachemak silt loam, 35 to 45 percent slopes

Elevation: 312 to 2.313 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 35 to 45 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Tuxedni and similar soils: 5 to 15 percent of the map unit

# 578—Kachemak silt loam, cool, 4 to 8 percent slopes

Elevation: 1,197 to 2,362 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

# Kachemak, cool, and similar soils

Extent: 70 to 100 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 15 percent of the map unit Tuxedni and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 579—Kachemak silt loam, cool, 8 to 15 percent slopes

Elevation: 1,280 to 2,247 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Kachemak, cool, and similar soils

Extent: 70 to 100 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 25 percent of the map unit Tuxedni and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 580—Kachemak silt loam, cool, 15 to 25 percent slopes

Elevation: 1,230 to 2,247 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 5 to 15 percent of the map unit

# 581—Kachemak silt loam, cool, 25 to 35 percent slopes

Elevation: 1,362 to 2,329 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

# Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 25 to 35 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Redoubt and similar soils: 10 to 25 percent of the map unit Tuxedni and similar soils: 0 to 10 percent of the map unit

# 582—Kachemak silt loam, cool, 35 to 45 percent slopes

Elevation: 1.247 to 2.001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

# Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 35 to 45 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Redoubt and similar soils: 10 to 25 percent of the map unit Tuxedni and similar soils: 0 to 10 percent of the map unit

# 583—Kachemak silt loam, forested, 4 to 8 percent slopes

Elevation: 541 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

# Kachemak, forested, and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, summits, shoulders

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 5 to 20 percent of the map unit Tuxedni and similar soils: 5 to 15 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 584—Kachemak silt loam, forested, 8 to 15 percent slopes

Elevation: 476 to 2.018 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Kachemak, forested, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

# **Minor Components**

Tuxedni and similar soils: 5 to 15 percent of the map unit Redoubt and similar soils: 5 to 15 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 585—Kachemak silt loam, forested, 15 to 25 percent slopes

Elevation: 492 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

## Kachemak, forested, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 15 percent of the map unit Tuxedni and similar soils: 10 to 15 percent of the map unit

# 586—Kachemak, cool-Snowdance complex, 0 to 4 percent slopes

Elevation: 1,640 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Kachemak, cool, and similar soils

Extent: 50 to 70 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

#### Snowdance and similar soils

Extent: 30 to 50 percent of the map unit

Landform: till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability Bw—8 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

# 587—Kachemak, cool-Snowdance complex, 4 to 8 percent slopes

Elevation: 1,673 to 2,182 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Kachemak, cool, and similar soils

Extent: 50 to 70 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

#### Snowdance and similar soils

Extent: 30 to 50 percent of the map unit

Landform: till plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability Bw—8 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

# 588—Kachemak, cool-Snowdance complex, 8 to 15 percent slopes

Elevation: 1,575 to 2,411 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 130 days

## Kachemak, cool, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability B—8 to 30 inches; silt loam, high permeability

2C-30 to 60 inches; silt loam, moderately high permeability

#### Snowdance and similar soils

Extent: 25 to 50 percent of the map unit

Landform: till plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability Bw—8 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

# 589—Kalifonsky silt loam, 0 to 4 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

# Kalifonsky and similar soils

Extent: 80 to 86 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 0 to 4 percent Parent material: loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 9 inches; silt loam, high permeability Cg—9 to 16 inches; silt loam, high permeability

2C-16 to 60 inches; gravelly sand, high permeability

# **Minor Components**

Cohoe, dry, and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 4 to 10 percent of the map unit

# 590—Kalifonsky silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,148 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

## Kalifonsky and similar soils

Extent: 80 to 90 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 4 to 8 percent

Parent material: loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 9 inches; silt loam, high permeability Cg—9 to 16 inches; silt loam, high permeability 2C—16 to 60 inches; gravelly sand, high permeability

## **Minor Components**

Spenard and similar soils: 10 to 20 percent of the map unit

# 591—Kalifonsky-Typic Cryorthents complex, 4 to 45 percent slopes

Elevation: 344 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

## Kalifonsky and similar soils

Extent: 30 to 75 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 4 to 7 percent

Parent material: loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 9 inches; silt loam, high permeability Cq—9 to 16 inches; silt loam, high permeability

2C-16 to 60 inches; gravelly sand, high permeability

# Typic Cryorthents and similar soils

Extent: 15 to 50 percent of the map unit Landform: terraces on outwash plains

Slope shape: linear

Slope range: 20 to 45 percent

Parent material: sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2-33 to 60 inches; very gravelly silt loam, moderately high permeability

## **Minor Components**

Kichatna and similar soils: 0 to 20 percent of the map unit Spenard and similar soils: 0 to 20 percent of the map unit

# 592—Karluk silt loam, 0 to 4 percent slopes

Elevation: 3 to 148 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 115 days

## Karluk and similar soils

Extent: 70 to 85 percent of the map unit Landform: bogs on stream terraces

Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over fine-silty diatomeceous earth Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—14 inches; June-Sept.—14 to 20

inches Ponding: none

Available water capacity (approximate): 13.8 inches

Representative Profile:

Oa—0 to 3 inches; highly decomposed plant material, moderately low permeability

A—3 to 10 inches; silt loam, moderately high permeability Cg1—10 to 17 inches; silt loam, moderately high permeability 2Cg2—17 to 60 inches; silt loam, moderately high permeability

#### **Minor Components**

Nikolai and similar soils: 5 to 15 percent of the map unit Soldotna and similar soils: 5 to 15 percent of the map unit

# 593—Kashwitna silt loam, 0 to 4 percent slopes

Elevation: 180 to 1,017 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

# Kashwitna and similar soils

Extent: 60 to 90 percent of the map unit Landform: outwash plains, kame moraines

Position on slope: backslopes

Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over gravelly outwash

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, high permeability B—5 to 21 inches; silt loam, high permeability

2C-21 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Kalifonsky and similar soils: 5 to 15 percent of the map unit Iliamna and similar soils: 0 to 10 percent of the map unit

# 594—Kashwitna silt loam, 4 to 8 percent slopes

Elevation: 115 to 1,230 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Kashwitna and similar soils

Extent: 75 to 90 percent of the map unit Landform: kame moraines, outwash plains

Position on slope: backslopes

Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly outwash

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, high permeability B—5 to 21 inches; silt loam, high permeability

2C-21 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Kalifonsky and similar soils: 5 to 15 percent of the map unit Qutal and similar soils: 5 to 15 percent of the map unit

# 595—Kashwitna silt loam, 8 to 15 percent slopes

Elevation: 197 to 1,394 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

# Kashwitna and similar soils

Extent: 70 to 90 percent of the map unit Landform: kame moraines, outwash plains

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over gravelly outwash

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, high permeability B—5 to 21 inches; silt loam, high permeability

2C-21 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Tlikakila and similar soils: 5 to 15 percent of the map unit Redoubt and similar soils: 5 to 15 percent of the map unit

# 596—Kashwitna silt loams, moderately steep and strongly sloping

Elevation: 164 to 1,542 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

# Kashwitna, moderately steep, and similar soils

Extent: 40 to 55 percent of the map unit Landform: outwash plains, kame moraines

Position on slope: backslopes

Slope shape: convex

Slope range: 21 to 30 percent

Parent material: ash influenced loess over gravelly outwash

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, high permeability B—5 to 21 inches; silt loam, high permeability

2C-21 to 60 inches; very gravelly sand, high permeability

## Kashwitna, strongly sloping, and similar soils

Extent: 35 to 45 percent of the map unit Landform: kame moraines, outwash plains

Position on slope: summits, footslopes, shoulders

Slope shape: convex

Slope range: 10 to 20 percent

Parent material: ash influenced loess over gravelly outwash

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.6 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, high permeability B—5 to 21 inches; silt loam, high permeability

2C-21 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Spenard and similar soils: 5 to 20 percent of the map unit

# 597—Kenai silt loam, 0 to 4 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Kenai and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

#### **Minor Components**

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit Clam Gulch and similar soils: 4 to 15 percent of the map unit

# 598—Kenai silt loam, 4 to 8 percent slopes

Elevation: 82 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

## Kenai and similar soils

Extent: 65 to 85 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

# **Minor Components**

Clam Gulch and similar soils: 5 to 25 percent of the map unit Redoubt and similar soils: 0 to 25 percent of the map unit

# 599—Kenai silt loam, 8 to 15 percent slopes

Elevation: 66 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

#### Kenai and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B-6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C-25 to 60 inches; silty clay loam, moderately low permeability

# **Minor Components**

Clam Gulch and similar soils: 0 to 15 percent of the map unit Soldotna and similar soils: 0 to 10 percent of the map unit

# 600—Kenai silt loam, 15 to 25 percent slopes

Elevation: 148 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 120 days

#### Kenai and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E-2 to 6 inches; silt loam, high permeability

B-6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C-25 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Soldotna and similar soils: 0 to 15 percent of the map unit Clam Gulch and similar soils: 0 to 10 percent of the map unit

# 601—Kenai silt loam, 25 to 45 percent slopes

Elevation: 164 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 115 days

## Kenai and similar soils

Extent: 85 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Clam Gulch and similar soils: 5 to 10 percent of the map unit Redoubt and similar soils: 0 to 5 percent of the map unit

# 602—Kenai silt loams, moderately steep and gently sloping

Elevation: 82 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 115 days

#### Kenai, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

# Kenai, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, toeslopes

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

# **Minor Components**

Clam Gulch and similar soils: 5 to 15 percent of the map unit Redoubt and similar soils: 0 to 15 percent of the map unit

# 603—Kenai-Starichkof association, 0 to 25 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Kenai and similar soils

Extent: 50 to 70 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 4 to 25 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

## Starichkof and similar soils

Extent: 20 to 40 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 2 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## **Minor Components**

Clam Gulch and similar soils: 0 to 15 percent of the map unit

# 604—Kichatna silt loam, 0 to 8 percent slopes

Elevation: 3 to 295 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Kichatna and similar soils

Extent: 60 to 85 percent of the map unit Landform: terraces on outwash plains

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

Bs-4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C-14 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Soldotna and similar soils: 0 to 20 percent of the map unit Tangerra and similar soils: 0 to 12 percent of the map unit Longmare and similar soils: 0 to 12 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 605—Kichatna silt loam, 8 to 15 percent slopes

Elevation: 98 to 262 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

#### Kichatna and similar soils

Extent: 60 to 90 percent of the map unit Landform: hills on outwash plains

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Soldotna and similar soils: 10 to 25 percent of the map unit Coal Creek and similar soils: 0 to 8 percent of the map unit Starichkof and similar soils: 0 to 8 percent of the map unit

# 606—Kichatna silt loam, 15 to 25 percent slopes

Elevation: 66 to 1,772 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

## Kichatna and similar soils

Extent: 65 to 80 percent of the map unit

Landform: hills on outwash plains

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC-11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C-14 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Soldotna and similar soils: 15 to 35 percent of the map unit Karluk and similar soils: 0 to 5 percent of the map unit Doroshin and similar soils: 0 to 5 percent of the map unit

# 607—Kichatna silt loam, 25 to 45 percent slopes

Elevation: 3 to 2,034 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

## Kichatna and similar soils

Extent: 80 to 90 percent of the map unit Landform: hills on outwash plains

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C-14 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Kalifonsky and similar soils: 0 to 7 percent of the map unit

Soldotna and similar soils: 0 to 15 percent of the map unit Tlikakila and similar soils: 0 to 7 percent of the map unit

# 608—Kichatna silt loam, 45 to 60 percent slopes

Elevation: 0 to 1,575 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

#### Kichatna and similar soils

Extent: 65 to 80 percent of the map unit Landform: hills on outwash plains

Slope shape: linear

Slope range: 45 to 60 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC-11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C-14 to 60 inches; very gravelly sand, high permeability

# **Minor Components**

Benka and similar soils: 10 to 20 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit Redoubt and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 7 percent of the map unit

# 609—Kichatna-Killey association, 0 to 65 percent slopes

Elevation: 16 to 1.886 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

#### Kichatna and similar soils

Extent: 40 to 80 percent of the map unit Landform: terraces on outwash plains

Slope shape: linear

Slope range: 25 to 65 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC-11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

## Killey and similar soils

Extent: 20 to 60 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: frequent

Depth to high water table (approximate): April-May—18 to 30 inches; June-Sept.—18

inches Ponding: none

Available water capacity (approximate): 6.6 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A-2 to 6 inches; silt loam, moderately high permeability

C1—6 to 29 inches; stratified fine sand to silt loam, moderately high permeability

2C2—29 to 60 inches; very gravelly coarse sand, high permeability

# 610—Kidazgeni silt loam, 0 to 2 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 90 to 120 days

#### Kidazgeni and similar soils

Extent: 80 to 90 percent of the map unit

Landform: stream terraces Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat excessively drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.0 inches

Representative Profile:

A-0 to 4 inches; silt loam, moderately high permeability

AC—4 to 21 inches; stratified sand to silt loam, high permeability 2C—21 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Riverwash: 0 to 15 percent of the map unit

Susitna and similar soils: 0 to 10 percent of the map unit

# 611—Killey and Moose River soils, 0 to 2 percent slopes

Elevation: 0 to 1,886 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

# Killey and similar soils

Extent: 25 to 75 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: frequent

Depth to high water table (approximate): April-May—18 to 30 inches; June-Sept.—18

Ponding: none

Available water capacity (approximate): 6.6 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, moderately high permeability

C1—6 to 29 inches; stratified fine sand to silt loam, moderately high permeability

2C2-29 to 60 inches; very gravelly coarse sand, high permeability

## Moose River and similar soils

Extent: 25 to 75 percent of the map unit

Landform: flood plains
Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—8 inches

Ponding: none

Available water capacity (approximate): 6.3 inches

Representative Profile:

Oi—0 to 5 inches; slightly decomposed plant material, high permeability

A-5 to 10 inches; silt loam, moderately high permeability

Cg1—10 to 39 inches; stratified fine sand to silt loam to slightly decomposed plant material, moderately high permeability

2Cg2—39 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Chunilna and similar soils: 0 to 25 percent of the map unit Slikok and similar soils: 0 to 25 percent of the map unit Doroshin and similar soils: 0 to 15 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 612—Liten very fine sandy loam, 0 to 6 percent slopes

Elevation: 197 to 410 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Liten and similar soils

Extent: 70 to 90 percent of the map unit

Landform: dunes

Position on slope: shoulders, summits, backslopes

Slope shape: convex Slope range: 0 to 6 percent

Parent material: loess over sandy eolian deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.4 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E,Bs—2 to 8 inches; very fine sandy loam, high permeability

2C-8 to 60 inches; sand, high permeability

## **Minor Components**

Slikok and similar soils: 5 to 15 percent of the map unit Cohoe, dry, and similar soils: 0 to 20 percent of the map unit

# 613—Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 25 to 45 percent slopes

Elevation: 656 to 3.150 feet

Mean annual precipitation: 20 to 59 inches

Frost-free period: 75 to 120 days

# Lithic Haplocryands and similar soils

Extent: 30 to 70 percent of the map unit

Landform: mountains

Position on slope: footslopes, backslopes

Slope shape: convex

Slope range: 25 to 45 percent Parent material: volcanic ash over till Depth to bedrock (lithic): 8 to 19 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: very high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability A,B—2 to 12 inches; gravelly silt loam, moderately high permeability

R—12 to 60 inches; bedrock, impermeable

## Alic Haplocryands and similar soils

Extent: 10 to 45 percent of the map unit

Landform: mountains Slope shape: convex

Slope range: 25 to 45 percent Parent material: volcanic ash over till Depth to bedrock (lithic): 22 to 60 inches

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, high permeability

A,B-4 to 21 inches; silt loam, high permeability

2C-21 to 31 inches; very gravelly sandy loam, high permeability

R-31 to 60 inches; bedrock, impermeable

## **Rock outcrop**

Extent: 5 to 25 percent of the map unit

Landform: hills, mountains Slope range: 35 to 75 percent

## **Minor Components**

Typic Cryaquands and similar soils: 0 to 10 percent of the map unit

# 614—Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 45 to 100 percent slopes

Elevation: 558 to 3.773 feet

Mean annual precipitation: 30 to 59 inches

Frost-free period: 75 to 120 days

# Lithic Haplocryands and similar soils

Extent: 30 to 70 percent of the map unit

Landform: mountains

Position on slope: backslopes, footslopes

Slope shape: convex

Slope range: 45 to 100 percent Parent material: volcanic ash over till Depth to bedrock (lithic): 8 to 19 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: very high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability A,B—2 to 12 inches; gravelly silt loam, moderately high permeability

R—12 to 60 inches; bedrock, impermeable

# Alic Haplocryands and similar soils

Extent: 10 to 45 percent of the map unit

Landform: mountains Slope shape: concave

Slope range: 45 to 100 percent Parent material: volcanic ash over till Depth to bedrock (lithic): 22 to 60 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, high permeability

A,B-4 to 21 inches; silt loam, high permeability

2C-21 to 31 inches; very gravelly sandy loam, high permeability

R-31 to 60 inches; bedrock, impermeable

## **Rock outcrop**

Extent: 15 to 25 percent of the map unit

Landform: hills, mountains Slope range: 45 to 120 percent

## **Minor Components**

Typic Cryaquands and similar soils: 0 to 10 percent of the map unit

# 615—Longmare silt loam, 0 to 4 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Longmare and similar soils

Extent: 70 to 85 percent of the map unit Landform: moraines, outwash plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—29 inches; June-Sept.—24 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 10.5 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E—4 to 6 inches; silt loam, high permeability B—6 to 18 inches; silt loam, high permeability C1—18 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

# **Minor Components**

Soldotna and similar soils: 0 to 15 percent of the map unit Kalifonsky and similar soils: 0 to 10 percent of the map unit Tangerra and similar soils: 0 to 10 percent of the map unit

# 616—Longmare silt loam, 4 to 8 percent slopes

Elevation: 3 to 295 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Longmare and similar soils

Extent: 70 to 85 percent of the map unit Landform: moraines, outwash plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—29 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 10.5 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E—4 to 6 inches; silt loam, high permeability B—6 to 18 inches; silt loam, high permeability C1—18 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

# **Minor Components**

Soldotna and similar soils: 0 to 15 percent of the map unit Kalifonsky and similar soils: 0 to 10 percent of the map unit Tangerra and similar soils: 0 to 10 percent of the map unit

# 617—Mutnala silt loam, 0 to 4 percent slopes

Elevation: 33 to 1,542 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Mutnala and similar soils

Extent: 50 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: summits Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

# **Minor Components**

Qutal and similar soils: 10 to 25 percent of the map unit Redoubt and similar soils: 5 to 25 percent of the map unit Spenard and similar soils: 5 to 25 percent of the map unit

# 618—Mutnala silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Mutnala and similar soils

Extent: 50 to 95 percent of the map unit

Landform: moraines on till plains Position on slope: summits Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 5 to 25 percent of the map unit Qutal and similar soils: 5 to 25 percent of the map unit Redoubt and similar soils: 5 to 25 percent of the map unit

# 619—Mutnala silt loam, 8 to 15 percent slopes

Elevation: 3 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Mutnala and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains
Position on slope: summits
Slope shape: convex
Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

# **Minor Components**

Spenard and similar soils: 10 to 15 percent of the map unit Qutal and similar soils: 5 to 25 percent of the map unit

# 620—Mutnala silt loam, 15 to 25 percent slopes

Elevation: 0 to 1,854 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

# Mutnala and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains Position on slope: summits Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 0 to 15 percent of the map unit Qutal and similar soils: 0 to 5 percent of the map unit

# 621—Mutnala silt loam, 25 to 45 percent slopes

Elevation: 230 to 1.476 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

## Mutnala and similar soils

Extent: 60 to 90 percent of the map unit Landform: moraines on till plains Position on slope: summits

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

# **Minor Components**

Kichatna and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 15 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 622—Mutnala silt loam, 45 to 60 percent slopes

Elevation: 49 to 1,427 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

## Mutnala and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains
Position on slope: summits
Slope shape: convex

Slope range: 45 to 60 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Kichatna and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 15 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 623—Mutnala-Starichkof-Slikok association, undulating to hilly

Elevation: 180 to 1,837 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

## Mutnala and similar soils

Extent: 20 to 60 percent of the map unit

Landform: moraines on till plains Position on slope: summits Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability Bw—7 to 23 inches; silt loam, high permeability

2C-23 to 60 inches; gravelly sandy loam, moderately high permeability

#### Starichkof and similar soils

Extent: 20 to 75 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi-0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## Slikok and similar soils

Extent: 5 to 40 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 4 to 8 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water-moderate; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability A—13 to 51 inches; mucky silt loam, high permeability

2C-51 to 60 inches; gravelly silt loam, moderately high permeability

# 624—Naptowne silt loam, 0 to 4 percent slopes

Elevation: 3 to 394 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 130 days

#### Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains, moraines

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Pondina: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 625—Naptowne silt loam, 4 to 8 percent slopes

Elevation: 3 to 459 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

#### Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines, till plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high

permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

#### **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 626—Naptowne silt loam, 8 to 15 percent slopes

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

## Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

# **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 627—Naptowne silt loam, 15 to 25 percent slopes

Elevation: 131 to 476 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

# Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

# **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit

# 628—Naptowne silt loam, 25 to 60 percent slopes

Elevation: 98 to 427 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines Slope shape: linear

Slope range: 25 to 60 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 2 to 7 percent of the map unit

# 629—Naptowne silt loam, undulating

Elevation: 115 to 410 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains, moraines

Slope shape: linear

Slope range: 3 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit Nikolai and similar soils: 1 to 7 percent of the map unit

# 630—Naptowne silt loams, moderately steep and strongly sloping

Elevation: 148 to 459 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Naptowne, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 21 to 30 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## Naptowne, strongly sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines

Position on slope: summits, shoulders, footslopes

Slope shape: convex

Slope range: 10 to 20 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Nikolai and similar soils: 2 to 7 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit

# 631—Naptowne silt loams, strongly sloping and gently sloping

Elevation: 131 to 443 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

# Naptowne, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 8 to 16 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## Naptowne, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines

Position on slope: summits, footslopes, shoulders

Slope shape: convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches: silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

## **Minor Components**

Soldotna and similar soils: 5 to 15 percent of the map unit Nikolai and similar soils: 2 to 7 percent of the map unit Tuxedni and similar soils: 2 to 10 percent of the map unit

# 632—Niklason very fine sandy loam, 0 to 2 percent slopes

Elevation: 3 to 262 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Niklason and similar soils

Extent: 80 to 90 percent of the map unit

Landform: flood plains Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water-slight; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.8 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A-2 to 6 inches; silt loam, moderately high permeability

C1—6 to 23 inches; stratified sand to silt loam, high permeability 2C2—23 to 60 inches; extremely gravelly sand, high permeability

## **Minor Components**

Kidazqeni and similar soils: 5 to 15 percent of the map unit

# 633—Nikolaevsk silt loam, 0 to 4 percent slopes

Elevation: 213 to 2.018 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

#### Nikolaevsk and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, footslopes, toeslopes

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.9 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E,B-2 to 20 inches; silt loam, high permeability

2Cg-20 to 60 inches; very cobbly loamy sand, high permeability

## **Minor Components**

Tokositna and similar soils: 0 to 15 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 634—Nikolaevsk silt loam, 4 to 8 percent slopes

Elevation: 689 to 1,886 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Nikolaevsk and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, footslopes, toeslopes

Slope shape: concave Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.9 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E,B-2 to 20 inches; silt loam, high permeability

2Cg-20 to 60 inches; very cobbly loamy sand, high permeability

## **Minor Components**

Tokositna and similar soils: 5 to 20 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 635—Nikolaevsk silt loam, 8 to 15 percent slopes

Elevation: 1,165 to 1,837 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

## Nikolaevsk and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: toeslopes, footslopes, summits

Slope shape: concave Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.9 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E,B-2 to 20 inches; silt loam, high permeability

2Cg-20 to 60 inches; very cobbly loamy sand, high permeability

## **Minor Components**

Tokositna and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 5 percent of the map unit

## 636—Nikolai peat, 0 to 4 percent slopes

Elevation: 3 to 1,690 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

#### Nikolai and similar soils

Extent: 60 to 95 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial

deposits

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability

Oa—2 to 32 inches; muck, moderately high permeability 2Cg1—32 to 41 inches; silt loam, high permeability 3Cg2—41 to 60 inches; loamy sand, very high permeability

## **Minor Components**

Starichkof and similar soils: 2 to 25 percent of the map unit Truuli and similar soils: 3 to 20 percent of the map unit

# 637—Nikolai, somewhat poorly drained-Tuxedni complex, 0 to 4 percent slopes

Elevation: 3 to 771 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 115 days

## Nikolai, somewhat poorly drained, and similar soils

Extent: 50 to 80 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: concave Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial

deposits

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—25 inches

Pondina: none

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability Oa—2 to 32 inches; muck, moderately high permeability 2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2-41 to 60 inches; loamy sand, very high permeability

#### Tuxedni and similar soils

Extent: 15 to 40 percent of the map unit

Landform: till plains Slope shape: linear

Slope range: 0 to 3 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water-slight; by wind-severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Pondina: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability 2C1—24 to 36 inches; silt loam, high permeability

3C2-36 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Cohoe, dry, and similar soils: 0 to 15 percent of the map unit Soldotna and similar soils: 0 to 20 percent of the map unit

# 638—Puntilla silt loam, 4 to 15 percent slopes

Elevation: 968 to 1,903 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Puntilla and similar soils

Extent: 50 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 4 to 15 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 13.8 inches

Representative Profile:

Oi—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 10 inches; silt loam, high permeability E,B—10 to 36 inches; silt loam, high permeability

2C—36 to 60 inches; gravelly loam, moderately high permeability

# **Minor Components**

Kachemak and similar soils: 10 to 35 percent of the map unit Tuxedni and similar soils: 0 to 15 percent of the map unit

## 639—Puntilla silt loam, 8 to 25 percent slopes

Elevation: 902 to 1.903 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Puntilla and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 13.8 inches

Representative Profile:

Oi-0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 10 inches; silt loam, high permeability E,B—10 to 36 inches; silt loam, high permeability

2C-36 to 60 inches; gravelly loam, moderately high permeability

# **Minor Components**

Snowdance and similar soils: 0 to 15 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 640—Qutal silt loam, 0 to 4 percent slopes

Elevation: 49 to 2,198 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### **Qutal and similar soils**

Extent: 50 to 95 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Floodina: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,B—3 to 10 inches; silt loam, high permeability Bw—10 to 24 inches; silt loam, high permeability

2Cg—24 to 48 inches; silt loam, moderately high permeability 3C—48 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Spenard and similar soils: 0 to 25 percent of the map unit Whitsol and similar soils: 5 to 25 percent of the map unit

Starichkof and similar soils: 0 to 25 percent of the map unit

## 641—Qutal silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### **Qutal and similar soils**

Extent: 50 to 99 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes Slope shape: concave Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high

permeability

E,B—3 to 10 inches; silt loam, high permeability

Bw—10 to 24 inches; silt loam, high permeability

2Cg—24 to 48 inches; silt loam, moderately high permeability 3C—48 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Spenard and similar soils: 0 to 25 percent of the map unit Whitsol and similar soils: 0 to 25 percent of the map unit

# 642—Qutal silt loam, 8 to 15 percent slopes

Elevation: 16 to 1,542 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### **Qutal and similar soils**

Extent: 70 to 90 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes Slope shape: concave Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Floodina: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,B—3 to 10 inches; silt loam, high permeability Bw—10 to 24 inches; silt loam, high permeability

2Cg—24 to 48 inches; silt loam, moderately high permeability 3C—48 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit Whitsol and similar soils: 5 to 15 percent of the map unit

# 643—Redoubt silt loam, 0 to 4 percent slopes

Elevation: 10 to 1,690 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 90 to 130 days

#### Redoubt, terraces, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Iliamna, terraces, and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 20 percent of the map unit

## 644—Redoubt silt loam, 4 to 15 percent slopes

Elevation: 16 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

## Redoubt and similar soils

Extent: 70 to 95 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 4 to 15 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 5 to 15 percent of the map unit Iliamna and similar soils: 5 to 20 percent of the map unit

# 645—Redoubt silt loam, 15 to 45 percent slopes

Elevation: 3 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

## Redoubt and similar soils

Extent: 70 to 90 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability 2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

## **Minor Components**

Iliamna and similar soils: 0 to 15 percent of the map unit Tuxedni and similar soils: 5 to 15 percent of the map unit

# 646—Redoubt silt loam, cool, 0 to 8 percent slopes

Elevation: 1,066 to 1,985 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Redoubt, cool, and similar soils

Extent: 50 to 85 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

#### **Minor Components**

Benka and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 25 percent of the map unit

# 647—Redoubt silt loams, moderately steep and gently sloping

Elevation: 3 to 558 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

## Redoubt, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

## Redoubt, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

#### **Minor Components**

Starichkof and similar soils: 5 to 15 percent of the map unit Slikok and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

# 648—Redoubt, cool-Tuxedni complex, 3 to 45 percent slopes

Elevation: 1,115 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

## Redoubt, cool, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 3 to 45 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs-2 to 22 inches; silt loam, high permeability

2C-22 to 60 inches; gravelly sandy loam, moderately high permeability

#### Tuxedni and similar soils

Extent: 25 to 40 percent of the map unit

Landform: till plains, hills Position on slope: toeslopes Slope shape: concave Slope range: 3 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability 2C1—24 to 36 inches; silt loam, high permeability

3C2-36 to 60 inches; gravelly sandy loam, high permeability

#### **Minor Components**

Chunilna and similar soils: 0 to 10 percent of the map unit

## 649—Riverwash

Elevation: 0 to 164 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

## Riverwash

Extent: 100 percent of the map unit

Landform: flood plains Slope range: 0 to 2 percent

# 650—Salamatof and Doroshin peats, 0 to 2 percent slopes

Elevation: 98 to 1,985 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

## Salamatof and similar soils

Extent: 50 to 75 percent of the map unit

Landform: fens on till plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: mossy organic material

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—0 inches

Pondina: occasional

Available water capacity (approximate): 16.5 inches

Representative Profile:

Oi1—0 to 4 inches; peat, high permeability

Oi2-4 to 60 inches; woody peat, high permeability

## Doroshin and similar soils

Extent: 20 to 50 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability 2Cg—36 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Slikok and similar soils: 0 to 25 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

# 651—Salamatof peat, 0 to 4 percent slopes

Elevation: 3 to 1,952 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

## Salamatof and similar soils

Extent: 50 to 90 percent of the map unit

Landform: fens on till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mossy organic material

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—0 inches

Ponding: occasional

Available water capacity (approximate): 16.5 inches

Representative Profile:

Oi1—0 to 4 inches; peat, high permeability

Oi2—4 to 60 inches; woody peat, high permeability

# **Minor Components**

Doroshin and similar soils: 5 to 35 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

# 652—Slikok peat, 0 to 4 percent slopes

Elevation: 3 to 1,558 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

## Slikok and similar soils

Extent: 65 to 90 percent of the map unit

Landform: depressions on till plains, flood plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability A—13 to 51 inches; mucky silt loam, high permeability

2C-51 to 60 inches; gravelly silt loam, moderately high permeability

## **Minor Components**

Doroshin and similar soils: 0 to 25 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 653—Slikok peat, 4 to 8 percent slopes

Elevation: 33 to 1,575 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

## Slikok and similar soils

Extent: 60 to 90 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 4 to 8 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability A—13 to 51 inches; mucky silt loam, high permeability

2C-51 to 60 inches; gravelly silt loam, moderately high permeability

## **Minor Components**

Mutnala and similar soils: 0 to 15 percent of the map unit Doroshin and similar soils: 0 to 25 percent of the map unit

# 654—Smithfha loamy very fine sand, 4 to 8 percent slopes

Elevation: 7 to 213 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

## Smithfha and similar soils

Extent: 80 to 95 percent of the map unit

Landform: plains
Slope shape: convex
Slope range: 4 to 8 percent

Parent material: coarse-loamy eolian deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, high permeability

E—3 to 4 inches; loamy very fine sand, high permeability Bw—4 to 18 inches; loamy very fine sand, high permeability C—18 to 60 inches; loamy very fine sand, high permeability

# **Minor Components**

Cohoe, dry, and similar soils: 0 to 15 percent of the map unit Nikolai and similar soils: 0 to 10 percent of the map unit

# 655—Smithfha loamy very fine sand, 30 to 45 percent slopes

Elevation: 33 to 230 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

## Smithfha and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hills Slope shape: convex

Slope range: 30 to 45 percent

Parent material: coarse-loamy eolian deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, high permeability

E—3 to 4 inches; loamy very fine sand, high permeability Bw—4 to 18 inches; loamy very fine sand, high permeability C—18 to 60 inches; loamy very fine sand, high permeability

## **Minor Components**

Coal Creek and similar soils: 0 to 8 percent of the map unit Starichkof and similar soils: 0 to 7 percent of the map unit

## 656—Smokey Bay silt loam, 0 to 4 percent slopes

Elevation: 3 to 279 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

## Smokey Bay and similar soils

Extent: 75 to 90 percent of the map unit

Landform: alluvial fans Position on slope: shoulders

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A-2 to 9 inches; silt loam, moderately high permeability

Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability

Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

## **Minor Components**

Beluga and similar soils: 10 to 25 percent of the map unit

# 657—Smokey Bay silt loam, 8 to 15 percent slopes

Elevation: 16 to 656 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

## Smokey Bay and similar soils

Extent: 75 to 90 percent of the map unit

Landform: alluvial fans
Position on slope: shoulders

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A-2 to 9 inches; silt loam, moderately high permeability

Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high

permeability

Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

## **Minor Components**

Beluga and similar soils: 10 to 25 percent of the map unit

## 658—Snowdance mucky silt loam, 0 to 8 percent slopes

Elevation: 1,509 to 2,657 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 85 to 130 days

#### Snowdance and similar soils

Extent: 80 to 90 percent of the map unit

Landform: till plains
Position on slope: summits

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability Bw—8 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

# **Minor Components**

Kachemak, cool, and similar soils: 0 to 20 percent of the map unit

# 659—Soldotna silt loam, 0 to 4 percent slopes

Elevation: 7 to 377 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Soldotna and similar soils

Extent: 75 to 95 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water-slight; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Tlikakila and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 660—Soldotna silt loam, 4 to 8 percent slopes

Elevation: 3 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

## Soldotna and similar soils

Extent: 70 to 95 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Kalifonsky and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit

# 661—Soldotna silt loam, 8 to 15 percent slopes

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Soldotna and similar soils

Extent: 80 to 95 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Kalifonsky and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 10 percent of the map unit Foreland and similar soils: 0 to 5 percent of the map unit

# 662—Soldotna silt loam, 15 to 25 percent slopes

Elevation: 16 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Soldotna and similar soils

Extent: 80 to 90 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Kalifonsky and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 10 percent of the map unit Foreland and similar soils: 0 to 5 percent of the map unit

# 663—Soldotna silt loam, sandy substratum, 4 to 8 percent slopes

Elevation: 66 to 394 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

## **Minor Components**

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 664—Soldotna silt loam, sandy substratum, 8 to 15 percent slopes

Elevation: 82 to 459 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

## **Minor Components**

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit Kenai and similar soils: 0 to 5 percent of the map unit Tangerra and similar soils: 0 to 5 percent of the map unit Nikolai and similar soils: 0 to 5 percent of the map unit Spenard and similar soils: 0 to 5 percent of the map unit

# 665—Soldotna silt loam, sandy substratum, 15 to 25 percent slopes

Elevation: 16 to 525 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Soldotna, sandy substratum, and similar soils

Extent: 75 to 85 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

## **Minor Components**

Naptowne and similar soils: 0 to 15 percent of the map unit Kenai and similar soils: 0 to 10 percent of the map unit Tangerra and similar soils: 0 to 10 percent of the map unit

# 666—Soldotna silt loam, sandy substratum, undulating

Elevation: 3 to 443 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

#### Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

## **Minor Components**

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit Tangerra and similar soils: 0 to 10 percent of the map unit Tuxedni, warm, and similar soils: 0 to 10 percent of the map unit Coal Creek and similar soils: 0 to 10 percent of the map unit

# 667—Soldotna silt loams, strongly sloping and gently sloping

Elevation: 66 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Soldotna, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 7 to 12 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

## Soldotna, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains, outwash plains Position on slope: summits, shoulders, toeslopes

Slope shape: linear, convex Slope range: 2 to 6 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Kalifonsky and similar soils: 0 to 7 percent of the map unit Starichkof and similar soils: 5 to 15 percent of the map unit Foreland and similar soils: 3 to 10 percent of the map unit

# 668—Soldotna, sandy substratum-Kenai complex, 25 to 45 percent slopes

Elevation: 66 to 476 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

## Soldotna, sandy substratum, and similar soils

Extent: 30 to 65 percent of the map unit

Landform: moraines on till plains Position on slope: summits

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: very high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

#### Kenai and similar soils

Extent: 30 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: very high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Naptowne and similar soils: 0 to 15 percent of the map unit Clam Gulch and similar soils: 0 to 5 percent of the map unit Cohoe, dry, and similar soils: 0 to 15 percent of the map unit

# 669—Soldotna, sandy substratum-Kenai complex, undulating

Elevation: 82 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Soldotna, sandy substratum, and similar soils

Extent: 30 to 65 percent of the map unit

Landform: outwash plains Slope shape: linear

Slope range: 2 to 10 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability 2C2—29 to 60 inches; sand, high permeability

## Kenai and similar soils

Extent: 30 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 2 to 10 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability 3C—25 to 60 inches; silty clay loam, moderately low permeability

## **Minor Components**

Clam Gulch and similar soils: 0 to 15 percent of the map unit Cohoe, dry, and similar soils: 0 to 15 percent of the map unit

Naptowne, gently sloping, and similar soils: 0 to 15 percent of the map unit

Naptowne, steep, and similar soils: 0 to 5 percent of the map unit

# 670—Soldotna-Kichatna complex, rolling

Elevation: 197 to 509 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

## Soldotna and similar soils

Extent: 40 to 70 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

#### Kichatna and similar soils

Extent: 25 to 45 percent of the map unit Landform: hills on outwash plains

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC-11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Foreland and similar soils: 5 to 15 percent of the map unit

# 671—Soldotna-Kichatna complex, steep

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

## Soldotna and similar soils

Extent: 40 to 70 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

#### Kichatna and similar soils

Extent: 25 to 45 percent of the map unit Landform: hills on outwash plains

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Pondina: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability Bs—4 to 11 inches; silt loam, moderately high permeability

2BC-11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C-14 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Foreland and similar soils: 5 to 15 percent of the map unit

# 672—Soldotna-Nikolai complex, 0 to 4 percent slopes

Elevation: 3 to 492 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

## Soldotna and similar soils

Extent: 50 to 75 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability Bs—7 to 22 inches; silt loam, high permeability C1—22 to 29 inches; silt loam, high permeability

2C2-29 to 60 inches; very gravelly sand, high permeability

#### Nikolai and similar soils

Extent: 25 to 50 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial

deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability Oa—2 to 32 inches; muck, moderately high permeability 2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2—41 to 60 inches; loamy sand, very high permeability

# 673—Spenard peat, 0 to 4 percent slopes

Elevation: 3 to 1,526 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

## Spenard and similar soils

Extent: 75 to 95 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18

inches Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability E—9 to 14 inches; silt loam, high permeability Bs—14 to 25 inches; silt loam, high permeability

2C-25 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Qutal and similar soils: 5 to 25 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

# 674—Spenard peat, 4 to 8 percent slopes

Elevation: 3 to 1,788 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

# Spenard and similar soils

Extent: 60 to 80 percent of the map unit Landform: depressions on till plains

Slope shape: concave Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability E—9 to 14 inches; silt loam, high permeability Bs—14 to 25 inches; silt loam, high permeability

2C-25 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Mutnala and similar soils: 5 to 20 percent of the map unit Qutal and similar soils: 5 to 20 percent of the map unit Doroshin and similar soils: 0 to 5 percent of the map unit

# 675—Spenard peat, 8 to 15 percent slopes

Elevation: 3 to 1,788 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Spenard and similar soils

Extent: 75 to 87 percent of the map unit

Landform: moraines on till plains

Position on slope: toeslopes, footslopes

Slope shape: concave Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18

inches Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability E—9 to 14 inches; silt loam, high permeability Bs—14 to 25 inches; silt loam, high permeability

2C-25 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Mutnala and similar soils: 5 to 15 percent of the map unit Doroshin and similar soils: 0 to 10 percent of the map unit

# 676—Starichkof and Doroshin soils, 0 to 4 percent slopes

Elevation: 3 to 2,034 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

#### Starichkof and similar soils

Extent: 40 to 75 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Floodina: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi-0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

#### Doroshin and similar soils

Extent: 25 to 60 percent of the map unit

Landform: fens on till plains, depressions on till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability 2Cg—36 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Slikok and similar soils: 0 to 20 percent of the map unit

# 677—Starichkof peat, 0 to 4 percent slopes

Elevation: 3 to 1,995 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

## Starichkof and similar soils

Extent: 70 to 85 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi-0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## **Minor Components**

Doroshin and similar soils: 5 to 25 percent of the map unit Slikok and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 7 percent of the map unit

## 678—Starichkof peat, 4 to 8 percent slopes

Elevation: 66 to 2,018 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 90 to 130 days

## Starichkof and similar soils

Extent: 60 to 90 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 4 to 8 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Doroshin and similar soils: 0 to 35 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

# 679—Starichkof peat, forested, 0 to 6 percent slopes

Elevation: 16 to 1,591 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

## Starichkof, forested, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 6 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Pondina: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## **Minor Components**

Doroshin and similar soils: 0 to 25 percent of the map unit

Water, fresh: 0 to 7 percent of the map unit

# 680—Starichkof-Slikok-Naptowne complex, 0 to 15 percent slopes

Elevation: 16 to 427 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

#### Starichkof and similar soils

Extent: 30 to 65 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 3 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high

permeability

#### Slikok and similar soils

Extent: 20 to 40 percent of the map unit

Landform: depressions on till plains, flood plains

Slope shape: linear

Slope range: 5 to 15 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

om: very nign

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability A—13 to 51 inches; mucky silt loam, high permeability

2C-51 to 60 inches; gravelly silt loam, moderately high permeability

## Naptowne and similar soils

Extent: 15 to 35 percent of the map unit

Landform: moraines Slope shape: linear

Slope range: 0 to 10 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability Bw—13 to 20 inches; silt loam, high permeability

2C-20 to 60 inches; very gravelly fine sandy loam, high permeability

# 681—Starichkof-Spenard complex, undulating

Elevation: 3 to 1,624 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

#### Starichkof and similar soils

Extent: 25 to 50 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Pondina: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

## Spenard and similar soils

Extent: 25 to 50 percent of the map unit

Landform: depressions on till plains

Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18

inches Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability E—9 to 14 inches; silt loam, high permeability Bs—14 to 25 inches; silt loam, high permeability

2C-25 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Mutnala and similar soils: 0 to 25 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

# 682—Susitna silt loam, 0 to 2 percent slopes

Elevation: 3 to 230 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

#### Susitna and similar soils

Extent: 80 to 95 percent of the map unit

Landform: stream terraces Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium and/or loamy

alluvium

Hazard of erosion (organic mat removed): by water-slight; by wind-severe

Runoff: low

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 3 inches; silt loam, moderately high permeability

C1—3 to 45 inches; stratified fine sand to silt loam, moderately high permeability

2C2-45 to 60 inches; extremely gravelly coarse sand, high permeability

#### Riverwash

Extent: 0 to 10 percent of the map unit

Landform: flood plains Slope range: 0 to 2 percent

## **Minor Components**

Aquic Cryofluvents and similar soils: 5 to 20 percent of the map unit

# 683—Susitna silt loam, 4 to 8 percent slopes

Elevation: 98 to 361 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

#### Susitna and similar soils

Extent: 80 to 95 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: loamy alluvium over sandy and gravelly alluvium and/or loamy

alluvium

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A-2 to 3 inches; silt loam, moderately high permeability

C1—3 to 45 inches; stratified fine sand to silt loam, moderately high permeability

2C2-45 to 60 inches; extremely gravelly coarse sand, high permeability

#### **Minor Components**

Aguic Cryofluvents and similar soils: 5 to 20 percent of the map unit

## 684—Talkeetna silt loam, 0 to 8 percent slopes

Elevation: 1,001 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

#### Talkeetna and similar soils

Extent: 55 to 94 percent of the map unit

Landform: till plains
Slope shape: convex
Slope range: 0 to 8 percent

Parent material: ash influenced loess over friable to firm glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.9 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E-2 to 7 inches; silt loam, high permeability

B-7 to 19 inches; mucky silt loam, high permeability

2C-19 to 60 inches; very gravelly sandy loam, moderately high permeability

## **Minor Components**

Starichkof and similar soils: 0 to 15 percent of the map unit Tuxedni and similar soils: 0 to 15 percent of the map unit

# 685—Talkeetna silt loam, 15 to 45 percent slopes

Elevation: 984 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Talkeetna and similar soils

Extent: 50 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over friable to firm glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Pondina: none

Available water capacity (approximate): 8.9 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E-2 to 7 inches; silt loam, high permeability

B-7 to 19 inches; mucky silt loam, high permeability

2C-19 to 60 inches; very gravelly sandy loam, moderately high permeability

#### **Minor Components**

Chunilna and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit

# 686—Talkeetna-Starichkof complex, 0 to 25 percent slopes

Elevation: 1,263 to 1,706 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

#### Talkeetna and similar soils

Extent: 25 to 60 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: ash influenced loess over friable to firm glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.9 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 7 inches; silt loam, high permeability

B—7 to 19 inches; mucky silt loam, high permeability

2C—19 to 60 inches; very gravelly sandy loam, moderately high permeability

#### Starichkof and similar soils

Extent: 30 to 40 percent of the map unit

Landform: fens Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high

permeability

# **Minor Components**

Chunilna and similar soils: 5 to 10 percent of the map unit

# 687—Tangerra silt loam, 0 to 6 percent slopes

Elevation: 3 to 410 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

## Tangerra and similar soils

Extent: 70 to 90 percent of the map unit

Landform: depressions on outwash plains, depressions on moraines

Slope shape: concave Slope range: 0 to 6 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—6 to 16 inches; June-Sept.—6

inches Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,Bs-4 to 8 inches; silt loam, moderately high permeability

Bw—8 to 16 inches; sandy loam, high permeability 2Cg1—16 to 46 inches; loamy sand, high permeability

3Cg2-46 to 60 inches; very gravelly loamy sand, high permeability

## **Minor Components**

Soldotna and similar soils: 0 to 15 percent of the map unit Nikolai and similar soils: 0 to 10 percent of the map unit Qutal and similar soils: 0 to 10 percent of the map unit Kalifonsky and similar soils: 0 to 10 percent of the map unit

## 688—Tidal flats

Elevation: 0 to 33 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

#### Beaches, tidal flats

Extent: 80 to 100 percent of the map unit

Landform: beaches

Slope range: 0 to 2 percent

## **Minor Components**

Water, saline: 0 to 20 percent of the map unit

## 689—Tlikakila silt loam, 0 to 4 percent slopes

Elevation: 66 to 1.886 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

#### Tlikakila and similar soils

Extent: 70 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly

glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high

permeability

A,Bw—1 to 19 inches; silt loam, high permeability 2Bg—19 to 34 inches; sandy loam, high permeability 3C—34 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Nikolai and similar soils: 0 to 30 percent of the map unit

# 690—Tlikakila silt loam, 4 to 8 percent slopes

Elevation: 459 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Tlikakila and similar soils

Extent: 60 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly

glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high permeability

A,Bw—1 to 19 inches; silt loam, high permeability

2Bg—19 to 34 inches; sandy loam, high permeability

3C-34 to 60 inches; very gravelly sand, high permeability

## **Minor Components**

Nikolai and similar soils: 0 to 25 percent of the map unit Kashwitna and similar soils: 0 to 25 percent of the map unit

# 691—Tlikakila silt loam, 8 to 15 percent slopes

Elevation: 968 to 1,936 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

#### Tlikakila and similar soils

Extent: 70 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly

glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high

permeability

A,Bw—1 to 19 inches; silt loam, high permeability 2Bg—19 to 34 inches; sandy loam, high permeability 3C—34 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Chunilna and similar soils: 0 to 15 percent of the map unit Cohoe and similar soils: 0 to 15 percent of the map unit

## 692—Tokositna silt loam, 0 to 4 percent slopes

Elevation: 148 to 1,903 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Tokositna and similar soils

Extent: 65 to 85 percent of the map unit

Landform: till plains

Position on slope: shoulders, summits

Slope shape: convex Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E,B—2 to 13 inches; silt loam, high permeability Bs—13 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 0 to 15 percent of the map unit Tuxedni and similar soils: 0 to 10 percent of the map unit

# 693—Tokositna silt loam, 4 to 8 percent slopes

Elevation: 148 to 1,903 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Tokositna and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: summits, shoulders

Slope shape: convex Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E,B—2 to 13 inches; silt loam, high permeability Bs—13 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

## **Minor Components**

Tuxedni and similar soils: 0 to 25 percent of the map unit

# 694—Tokositna silt loam, 8 to 15 percent slopes

Elevation: 230 to 1,821 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Tokositna and similar soils

Extent: 60 to 90 percent of the map unit

Landform: hills, till plains

Position on slope: summits, shoulders

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E,B—2 to 13 inches; silt loam, high permeability Bs—13 to 24 inches; silt loam, high permeability

2C-24 to 60 inches; very cobbly sandy loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 0 to 15 percent of the map unit

# 695—Truuli muck, 0 to 4 percent slopes

Elevation: 98 to 2,001 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

#### Truuli and similar soils

Extent: 50 to 90 percent of the map unit

Landform: depressions on terraces, depressions on till plains

Slope shape: concave Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water-slight; by wind-slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to

more than 60 inches

Ponding: none

Available water capacity (approximate): 17.9 inches

Representative Profile:

Oa—0 to 9 inches; muck, moderately low permeability A—9 to 19 inches; very fine sandy loam, high permeability 2Bg,2Cg1—19 to 43 inches; silt loam, high permeability

3Cg2-43 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Nikolai and similar soils: 0 to 25 percent of the map unit Tuxedni and similar soils: 0 to 25 percent of the map unit

# 696—Tutka-Kasitsna-Rock outcrop complex, very steep

Elevation: 0 to 2,149 feet

Mean annual precipitation: 20 to 49 inches

Frost-free period: 85 to 120 days

#### Tutka and similar soils

Extent: 40 to 60 percent of the map unit

Landform: mountain slopes

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 45 to 100 percent

Parent material: silty volcanic ash over glacial till over hard bedrock

Depth to bedrock (lithic): 12 to 25 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

Oe—0 to 7 inches; moderately decomposed plant material, moderately high permeability

E,B—7 to 13 inches; silt loam, high permeability

2B—13 to 21 inches; very gravelly mucky silt loam, high permeability

R-21 to 60 inches; bedrock, impermeable

#### Kasitsna and similar soils

Extent: 20 to 50 percent of the map unit

Landform: mountain slopes Slope shape: convex

Slope range: 45 to 100 percent

Parent material: silty volcanic ash over gravelly basal till; silty volcanic ash over;

reworked gravelly till; silty volcanic ash over gravelly colluvium

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.2 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bhs—3 to 18 inches; mucky silt loam, high permeability

Bs—18 to 31 inches; loam, moderately high permeability

2C-31 to 60 inches; very gravelly loam, moderately high permeability

#### **Rock outcrop**

Extent: 15 to 25 percent of the map unit

Landform: hills, mountains Slope range: 45 to 120 percent

# 697—Tutka-Portgraham complex, hilly to steep

Elevation: 3 to 1,427 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

#### Tutka and similar soils

Extent: 40 to 60 percent of the map unit

Landform: mountain slopes

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 20 to 50 percent

Parent material: silty volcanic ash over glacial till over hard bedrock

Depth to bedrock (lithic): 12 to 25 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

Oe—0 to 7 inches; moderately decomposed plant material, moderately high permeability

E,B-7 to 13 inches; silt loam, high permeability

2B—13 to 21 inches; very gravelly mucky silt loam, high permeability

R-21 to 60 inches; bedrock, impermeable

#### Portgraham and similar soils

Extent: 25 to 30 percent of the map unit

Landform: mountain slopes

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 25 to 35 percent

Parent material: silty volcanic ash over bedrock Depth to bedrock (lithic): 20 to 40 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.1 inches

Representative Profile:

Oi-0 to 2 inches; slightly decomposed plant material, high permeability

E-2 to 4 inches; silt loam, high permeability

B-4 to 27 inches; mucky silt loam, high permeability

R-27 to 60 inches; bedrock, impermeable

## **Minor Components**

Typic Cryaquands and similar soils: 0 to 15 percent of the map unit

# 698—Tuxedni silt loam, 0 to 8 percent slopes

Elevation: 689 to 1,968 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

#### Tuxedni and similar soils

Extent: 60 to 85 percent of the map unit

Landform: till plains

Slope shape: linear, convex Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability 2C1—24 to 36 inches; silt loam, high permeability

3C2-36 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 20 percent of the map unit

## 699—Tuxedni silt loam, 8 to 15 percent slopes

Elevation: 1,001 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

#### Tuxedni and similar soils

Extent: 60 to 85 percent of the map unit

Landform: hills, till plains Position on slope: toeslopes Slope shape: concave Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability 2C1—24 to 36 inches; silt loam, high permeability

3C2-36 to 60 inches; gravelly sandy loam, high permeability

## **Minor Components**

Redoubt and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 20 percent of the map unit

# 700—Tuxedni silt loam, warm, 0 to 8 percent slopes

Elevation: 3 to 1,214 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

## Tuxedni, warm, and similar soils

Extent: 50 to 95 percent of the map unit

Landform: till plains

Slope shape: linear, convex Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability 2C1—24 to 36 inches; silt loam, high permeability

3C2—36 to 60 inches; gravelly sandy loam, high permeability

#### **Minor Components**

Truuli and similar soils: 0 to 25 percent of the map unit Whitsol and similar soils: 0 to 10 percent of the map unit

# 701—Typic Cryaquents, 0 to 2 percent slopes

Elevation: 3 to 197 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

#### Typic Cryaquents and similar soils

Extent: 90 to 99 percent of the map unit

Landform: estuaries, deltas

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: silty and clayey over sandy and silty marine deposits Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—8 inches

Ponding: none

Available water capacity (approximate): 3.3 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, moderately high permeability

Cg—2 to 6 inches; silt loam, moderately high permeability C—6 to 60 inches; very gravelly sand, high permeability

#### **Minor Components**

Killey and similar soils: 0 to 10 percent of the map unit Clunie and similar soils: 0 to 5 percent of the map unit

Water, saline: 0 to 7 percent of the map unit

## 702—Typic Cryopsamments, 3 to 45 percent slopes

Elevation: 3 to 262 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

#### Typic Cryopsamments and similar soils

Extent: 80 to 95 percent of the map unit

Landform: dunes

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 3 to 45 percent Parent material: beach sand

Hazard of erosion (organic mat removed): by water-moderate; by wind-severe

Runoff: medium

Drainage class: excessively drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.5 inches

Representative Profile:

C-0 to 60 inches; sand, high permeability

## **Minor Components**

Smithfha and similar soils: 5 to 15 percent of the map unit Starichkof and similar soils: 0 to 5 percent of the map unit Kalifonsky and similar soils: 0 to 5 percent of the map unit

# 703—Typic Cryorthents, 100 to 150 percent slopes

Elevation: 0 to 1,427 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 130 days

## Typic Cryorthents and similar soils

Extent: 70 to 100 percent of the map unit

Landform: sea cliffs

Position on slope: backslopes

Slope shape: concave

Slope range: 100 to 150 percent

Parent material: debris slide deposits derived from interbedded sedimentary rock Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

## **Minor Components**

Badland, sea cliffs: 0 to 20 percent of the map unit Beluga and similar soils: 0 to 10 percent of the map unit Kachemak and similar soils: 0 to 10 percent of the map unit

#### 704—Urban land

Elevation: 3 to 1,345 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

**Urban land** 

Extent: 80 to 90 percent of the map unit

## **Minor Components**

Cohoe and similar soils: 0 to 10 percent of the map unit Kalifonsky and similar soils: 0 to 10 percent of the map unit Starichkof and similar soils: 0 to 10 percent of the map unit

## 705—Water, fresh

Elevation: 0 to 2,018 feet

Mean annual precipitation: 16 to 49 inches

Frost-free period: 75 to 130 days

Water, fresh

Extent: 100 percent of the map unit

# 706—Whitsol silt loam, 0 to 4 percent slopes

Elevation: 33 to 1,296 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 50 to 99 percent of the map unit

Landform: till plains

Slope shape: linear, convex Slope range: 0 to 4 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1—29 to 51 inches; very fine sandy loam, moderately high permeability

3C2—51 to 60 inches; very gravelly coarse sand, high permeability

## **Minor Components**

Qutal and similar soils: 0 to 20 percent of the map unit Spenard and similar soils: 0 to 15 percent of the map unit

# 707—Whitsol silt loam, 4 to 8 percent slopes

Elevation: 98 to 1,444 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 50 to 99 percent of the map unit

Landform: till plains

Slope shape: linear, convex Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi-0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1—29 to 51 inches; very fine sandy loam, moderately high permeability

3C2-51 to 60 inches; very gravelly coarse sand, high permeability

#### **Minor Components**

Qutal and similar soils: 0 to 20 percent of the map unit Spenard and similar soils: 0 to 15 percent of the map unit

# 708—Whitsol silt loam, 8 to 15 percent slopes

Elevation: 180 to 1,558 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 50 to 90 percent of the map unit

Landform: till plains, hills Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1-29 to 51 inches; very fine sandy loam, moderately high permeability

3C2-51 to 60 inches; very gravelly coarse sand, high permeability

## **Minor Components**

Kashwitna and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

## 709—Whitsol silt loam, 15 to 25 percent slopes

Elevation: 82 to 1,017 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 50 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1—29 to 51 inches; very fine sandy loam, moderately high permeability

3C2-51 to 60 inches; very gravelly coarse sand, high permeability

## **Minor Components**

Kashwitna and similar soils: 0 to 25 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 710—Whitsol silt loam, 25 to 45 percent slopes

Elevation: 295 to 1.214 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 60 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Floodina: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1-29 to 51 inches; very fine sandy loam, moderately high permeability

3C2—51 to 60 inches; very gravelly coarse sand, high permeability

## **Minor Components**

Kashwitna and similar soils: 0 to 25 percent of the map unit Redoubt and similar soils: 0 to 5 percent of the map unit Spenard and similar soils: 0 to 10 percent of the map unit

# 711—Whitsol-Doroshin complex, undulating

Elevation: 180 to 1,197 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

#### Whitsol and similar soils

Extent: 40 to 66 percent of the map unit

Landform: till plains

Slope shape: linear, convex Slope range: 1 to 8 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B-3 to 29 inches; silt loam, high permeability

2C1—29 to 51 inches; very fine sandy loam, moderately high permeability

3C2—51 to 60 inches; very gravelly coarse sand, high permeability

# Doroshin and similar soils

Extent: 25 to 40 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability 2Cg—36 to 60 inches; silt loam, moderately high permeability

## **Minor Components**

Spenard and similar soils: 0 to 25 percent of the map unit

# **Soil Properties**

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations; verify properties that cannot be estimated accurately by field observation; and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

# **Engineering Index Properties**

Table 8 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the USDA. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. Loam, for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. An appropriate modifier is added (for example, gravelly) if the content of particles coarser than sand is 15 percent or more. Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches (75 mm) in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches (75 mm) in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse-grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine-grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches (75 mm) in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In table 9, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrinkswell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

# **Physical and Chemical Analyses of Selected Soils**

The results of physical and chemical analysis of selected soil pedons from the survey area are available on the Web at <a href="http://ssldata.nrcs.usda.gov/querypage.asp">http://ssldata.nrcs.usda.gov/querypage.asp</a>. Under "State Admin Div," select "Alaska" and under "Country," select "Kenai Peninsula Borough." Click on "Execute Query" to see a list of sample pedons for the area.

# **Physical Properties**

Table 10 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

*Depth* to the upper and lower boundaries of each layer is indicated.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability ( $K_{sat}$ ) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity ( $K_{sat}$ ). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

*Organic matter* is the plant and animal residue in the soil at various stages of decomposition. The estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

*Erosion factor Kw* indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

*Erosion factor Kf* indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

*Erosion factor T* is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soils are grouped according to the amount of stable aggregates more than 0.84 mm in size. Soils containing rock fragments can occur in any group. The groups are as follows:

- 1. 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 2. 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 3. 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
- 4. 25 to 39 percent dry soil aggregates with greater than 35 percent clay or greater than 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
- 5. 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
- 6. 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
- 7. 50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
  - 8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

## **Chemical Properties**

Table 11 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

## **Water Features**

Table 12 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

The table described in this section gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Wet soil refers to a saturated zone in the soil. The table indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Under *water table kind*, an *apparent* water table is one that generally corresponds to the regional ground water level. A *perched* water table is one that is above an impermeable layer in the soil. The basis for determining that a water table is perched may be general knowledge of the area. The water table is proven to be perched if the water level in a borehole is observed to fall when the borehole is extended through the impermeable layer.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates surface water depth and the duration and frequency of ponding. Duration is expressed as very brief if less than 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. None means that ponding is not probable; rare that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); occasional that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and frequent that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

*Flooding* is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall

or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and frequency are estimated. Duration is expressed as extremely brief if 0.1 hour to 4 hours, very brief if 4 hours to 2 days, brief if 2 to 7 days, long if 7 to 30 days, and very long if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. None means that flooding is not probable; very rare that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); rare that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); occasional that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); frequent that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year); and very frequent that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

## **Soil Features**

Table 13 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impedes the movement of water and air through the soil or that restricts roots or otherwise provides an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation.

*Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

*Risk of corrosion* pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution,

acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high.* It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

# **Use and Management of the Soils**

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. It can also help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, foresters, botanists, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, permafrost, or unstable soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, and trails.

# **Land Capability Classification**

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit. Only capability class and subclass are presented for soils in Alaska.

*Capability classes*, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use. There are no Class 1 soils in Alaska due to the climate.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by w, s, or c because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

The acreage of soils in each capability class or subclass is shown in table 14.

## **Interpretive Ratings**

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. Other tables indicate the suitability of the soils for use as source materials. The ratings in these tables are both verbal and numerical.

#### **Rating Class Terms**

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *slightly limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *source*, *probable source*, and *improbable source* or as *good*, *fair*, and *poor*.

## **Numerical Ratings**

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. The numerical ratings, as they relate to each specific interpretation, are explained in the sections that follow.

## Recreation

The soils of the survey area are rated in table 15 according to limitations that affect their suitability for foot and ATV trails. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the table indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

The ratings in the table are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality and vegetation.

The information can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Foot and ATV trails for hiking, horseback riding, and ATV use should require little or no slope modification and site preparation through cutting and filling. These trails are not covered with surfacing material or vegetation. The ratings are based on the soil properties that affect trafficability, erodibility, dustiness, and the ease of revegetation. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

# **Ecological Sites**

An ecological site is an area of land, or collective areas of land, with a distinctive mix and pattern of potential natural plant communities (PNC), soils, landforms, hydrology, climate, and ecological properties and processes (such as nutrient cycling, vegetative succession, and productivity). Ecological site classification is not oriented to any type of land or land use and is applicable to forestlands and rangelands, wetlands, and uplands. The relationship between climate, landforms, soils, and vegetation, and the ability to discern differences in these factors from one site to another, is the basis for ecological site classification.

The primary emphasis of ecological site classification is usually the vegetation on a site. Vegetation is considered to be an indicator of the integrated factors of the environment. Productivity, the response of the vegetation to various types of disturbances, and use and management of the vegetation are principal concerns to landowners and managers.

A secondary, but equally important, emphasis of site classification is landform and soil relationships. In general, the relationships between landforms and soils across the landscape are fairly predictable. Natural disturbances by wildfire, wind, and flooding, to name a few, result in considerable variation in vegetation. Landforms and soils provide a stable resource base by which ecological sites can be determined regardless of existing vegetative conditions. In addition, inferences can be made regarding site dynamics and stability, soil processes, and appropriate management systems based on landform and soil types.

While abrupt or distinct breaks between landforms, soils, and vegetation occasionally do occur, more often than not the transition is gradual and indistinct. In addition, precipitation, temperature, and other climatic patterns, as well as microclimatic variables such as elevation, change gradually across the landscape. Therefore, an ecological site classification should be viewed as a landscape model. The boundaries between ecological sites are sometimes arbitrary and approximate. On the ground, the characteristics and properties within and between ecological sites are complex and variable, and usually overlap to some degree.

Ecological site classification does, however, provide a useful framework for correlating and compiling data and interpretations on multiple resources and landscape processes. Site classification is also a valuable framework for organizing, applying, and monitoring resource conservation systems for livestock grazing, forestry, wildlife habitat management, and other land uses.

## **Ecological Site-Soils-Vegetation Correlation**

An ecological site classification is developed by grouping soils within known climatic zones based on similarities in landforms, soils, and vegetation characteristics and potentials. Soils that support similar vegetation, have similar productivity, have similar ranges in physical characteristics, and whose known or expected ecological and management responses are similar, are grouped together into an ecological site. To achieve a high degree of correlation between the soils and vegetative potentials, soils usually are classified at the series or phase level, and occasionally the family level. At this level of soil classification, an ecological site is correlated to a single PNC.

Often, some segments of the landscape are inventoried and mapped at a lower level of intensity. Ecological sites are defined primarily on general relationships between soils, landforms, and general environmental relationships. Ecological sites associated with this level of classification usually support more than one PNC. Specific relationships between soil and landscape characteristics and the various potential plant communities often can be recognized in such a way that each community can be associated with a discernible portion of the site.

In table 16, the ecological site or sites correlated to the soils are listed by map unit symbol and soil name. A brief narrative description of each site is included below. Detailed descriptions of each ecological site are maintained in the Field Office Technical Guide at the local office of the Natural Resources Conservation Service.

## Forestland Ecological Sites of the Western Kenai Peninsula Area

Betula papyrifera–Picea glauca/Alnus–Oplopanax horridus/Calamagrostis canadensis. The climax plant community on this site is composed of a white spruce and alder dominated community, located along streams and rivers in the low elevations of the Fox River Flats. When flooded, this site becomes dominated by balsam poplar with an understory of bluejoint reedgrass. This site occurs at all aspects on elevations up to 65 feet, and on nearly level slopes.

*Picea–Betula papyrifera/Ledum–Vaccinium vitis-idaea/Cornus canadensis*. A spruce–birch forest is the most common plant community on this site, which ranges in elevation from 50 to 1,150 feet, and commonly occurs on gentle slopes between 0 to 10 percent. This forested site is found on all aspects in the northern part of the survey area.

*Picea glauca–Betula papyrifera/Calamagrostis canadensis–Equisetum arvense*. This site is found on a wide range of elevations (from 0 to 1,975 feet) and on all aspects. The vegetation is either a spruce–birch forest found on elevations up to 1,065 feet, or a spruce–birch–willow community found at elevations above 1,065 feet. Slopes range from 0 to 45 percent.

*Picea glauca–Betula papyrifera/Gymnocarpium dryopteris–Cornus suecica*. This is a very common site in the Soldotna–Sterling area. Fire has a strong influence on this site and the plant communities are varied depending on the history of the site, but are nearly always forested by spruce, birch, aspen, balsam poplar, or alder. Slopes are gentle, ranging from 0 to 30 percent, and elevations range from 5 to 650 feet.

*Picea glauca–Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris*. This site is found on a wide range of elevations (from 0 to 1,975 feet) and on all aspects. The vegetation is either a spruce–birch forest (found on elevations up to 1,066 feet) or a spruce–willow community (found at elevations above 1,066 feet). Slopes range from 0 to 45 percent.

**Picea mariana/Betula nana**. This organic, wetland site is found on gentle slopes of 0 to 10 percent in low-lying areas and supports a black spruce forest with a sphagnum and dwarf shrub understory. Elevations range from 5 to 985 feet and the site is found on all aspects.

**Picea mariana/Empetrum nigrum–Betula nana**. This forested site is found on wet soils and is dominated by black spruce with an understory of low shrubs that include crowberry and dwarf birch. Slopes are nearly level, ranging from 1 to 7 percent, with elevations ranging from 0 to 985 feet.

*Picea ×lutzi–Betula papyrifera/Gymnocarpium dryopteris–Rubus pedatus*. This low elevation (15 to 985 feet) forested site is common south of Tustemena Lake and supports a mixed hardwood and conifer community with an understory of ferns and rusty menziesia on cooler microsites and five-leaf bramble on warmer microsites. Slopes are varied, ranging from 0 to 40 percent.

**Picea** ×lutzi/Calamagrostis canadensis. Bluejoint reedgrass is a dominant plant on this site. Undisturbed, the site will have an overstory of spruce, with early seral stages of birch. Elevations of this site range from 4 to 1,300 feet and slopes range from 1 to 10 percent. However, it is most commonly found at 165 feet on about a 3 percent slope.

*Picea ×lutzi/Salix barclayi/Calamagrostis canadensis–Chamerion angustifolium*. This site is found south of Tustemena Lake and supports a Lutz spruce forest with a willow and bluejoint reedgrass understory. Elevations range from 130 to 1,150 feet, but the site is commonly found below 325 feet. Slopes are gentle, ranging from 0 to 30 percent.

*Picea ×lutzi/Salix barclayi–Empetrum nigrum/Equisetum arvense*. This site is found at elevations from 825 to 1,300 feet in the hill slopes north of Homer. Slopes range from 1 to 35 percent and the vegetation is composed of a spruce forest with a

willow and horsetail understory. When the spruce are first established after a disturbance, the understory may include bluejoint reedgrass and fireweed.

**Populus balsamifera/Oplopanax horridus.** Stands of balsam poplar dominate the closed canopy of this site, which is located on the coast of Cook Inlet, north and west of the city of Kenai. Because of its location, this site receives more rainfall and is slightly warmer than sites located inland on similar soils. Alder and high bush cranberry are components of one of the plant communities found on this site, growing along with the balsam poplar and devil's club understory. Elevations are low (from 0 to 325 feet) and slopes are variable (from 1 to 30 percent).

## Rangeland Ecological Sites of the Western Kenai Peninsula Area

**Alpine ridges**. Low growing dwarf shrubs dominate this alpine site, which is found on the tops of mountain ridges at elevations above 1,975 feet. Lichen communities make up a large part of this site's biomass; slopes are generally gentle, ranging from 0 to 10 percent.

**Beach Dunes and Ridges**. This sandy site is found along the shoreline of Cook Inlet where sand has accumulated at sea level. It is tidally influenced during extreme high tides and large storm events. Beach wild rye is the dominant plant and forms a nearly monotypic stand, with minor components of miscellaneous forbs such as beach pea. The vegetation on this site works to stabilize the sandy soil, and acts as a trap for wind blown sand, which slowly builds the dunes up over time.

**Loamy slopes**. This site is dominated by bluejoint reedgrass and fireweed and is found at elevations of 985 to 1,650 feet. Slopes range from 1 to 45 percent. With exposed soil and a nearby seed source, the site will support spruce trees as well.

**Lower Bench Toe Slopes**. Located at low elevations (15 to 650 feet) east of Homer, this site has been manipulated by humans for many years. Homesteaders commonly burned this area to keep tree encroachment down for cultivating fields and grazing animals. Slopes are gentle, ranging from 1 to 20 percent, and the vegetation ranges from bluejoint reedgrass dominated meadows to birch and spruce copses.

**Mountain slopes**. This site includes well drained soils under Alder scrub vegetation on mountains slopes between about 165 and 2,360 feet elevation. Bluejoint reedgrass, ferns, and other herbs dominate the scrub understory. Slopes range from about 5 to 45 percent.

**Mountain slopes, drainages.** Willow dominates this site, which is commonly found on mountain slopes and ridges at elevations above 1,300 feet. The forb-dominated understory is diverse. Slopes range from 0 to 25 percent. This site commonly occurs in moist areas, including drainages and north-facing slopes.

**Ramensk's Sedge**. This herbaceous site is found on all aspects of nearly level tidal flats that are frequently inundated by tidewater. Ramensk's sedge is the dominant species, with a few other salt-tolerant forbs found in small amounts.

**Rolling Uplands**. Located at elevations ranging from 1,150 to 1,975 feet on rolling hills in the Homer area, this site supports an herbaceous flowering meadow in addition to a willow dominated community and if allowed to encroach, a spruce dominated community with a willow understory. Slopes vary from 5 to 45 percent, but are commonly in the 10 to 20 percent range.

**Shallow Kettles**. This unique site is found on all aspects in the form of meadows surrounded by forest. This site is primarily an herbaceous, diverse forb community, but is slowly being encroached upon by spruce trees. Slopes are generally level and range from 0 to 5 percent. Elevations range from 25 to 985 feet.

**Wetland Complex**. Many different wetland plant communities can be found on this site, and differences are caused by varying factors including drainage, free water flow, and slight differences in elevation within the wetlands. Plant communities can vary from stunted black spruce forest to dwarf shrub to sedge dominated fringes of open water. Slopes are most commonly nearly level, but can be gently sloping (0 to 5 percent).

**Willow–Grass (Riparian)**. This riparian site is dominated by Barclay's willow with an understory of bluejoint reedgrass. It is found along small streams and large rivers on slopes ranging from 1 to 20 percent and on all aspects. Elevations range from 15 to 1,300 feet.

## **Forest Productivity**

In table 17, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

*Trees to manage* are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

## Engineering

This section provides information for planning land uses related to urban development and water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimates given under the heading Soil Properties.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet (1.5 to 2.1 m). Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section.

Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet (1.5 to 2.1 m) of the surface, soil wetness, depth to water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

## **Building Site Development**

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 18 and 19 show the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, permafrost, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, permafrost, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock, permafrost, or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

## **Sanitary Facilities**

Table 20 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical values in the tables indicate the severity of individual limitations. The values are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact

on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 4 and 6 feet (1.2 and 1.8 m) is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet (1.2 m) below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock, permafrost, or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches (5 cm) per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches (102 cm), if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

In an area sanitary landfill, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet (0.6 m) thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock, permafrost, or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

## **Construction Materials**

Tables 21 and 22 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

In table 21 the soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In table 22 the soils are rated *good*, *fair*, or *poor* as potential sources of topsoil, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil or roadfill. The lower the number, the greater the limitation. Only material in suitable quantity is evaluated.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. Rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material affect the ease of excavating, loading, and spreading. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet (1.8 m) high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet (1.5 m). It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties affecting the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. Large stones, depth to a water table, and slope affect the ease of excavation. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrinkswell potential). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

## **Hydric Soils**

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed in table 23.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin et al. 1979; U.S. Army Corps of Engineers 1987; National Research Council 1995; Tiner 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or non-hydric soil, however, information that is more specific is needed, such as information about the depth and duration of the water table. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in *Soil Taxonomy* (Soil Survey Staff 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff 1998) and in the *Soil Survey Manual* (Soil Survey Division Staff 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (Hurt et al. 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 centimeters). This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in the table. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council 1995; Hurt et al. 1998).

Some map units consist almost entirely of hydric soils, such as map unit SrA (in which all listed components are hydric). Other map units consist primarily of non-hydric soils, such as map unit SIsE (in which all listed components are non-hydric), or map unit KnB (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils.

The table also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

## Key To Hydric Soil Criteria

- 1. All Histosols except Folists, or
- 2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:
- a. somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season, or
  - b. poorly drained or very poorly drained and have either:
- (1) a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches, or for other soils
- (2) a frequently occurring water table at less than 1.0 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within 20 inches, or
- (3) a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 inches/hour in any layer within 20 inches, or
- 3. Soils that are frequently ponded for a long duration or very long duration during the growing season, or
- 4. Soils that are frequently flooded for a long duration or very long duration during the growing season.

## Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff 1998; Soil Survey Staff 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 24 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is *spodosol*.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is *cryod* (*cry*, meaning cold, plus *od*, from *spodosol*).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is *haplocryod* (*haplo*, meaning low base saturation, plus *cryod*, the suborder of the spodosols that has a cryic temperature regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *typic* identifies the subgroup that typifies the great group. An example is *Typic Haplocryods*.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is medial over loamy, amorphic, superactive Andic Haplocryods.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example from this survey area is the Cohoe series.

## Taxonomic Units and Their Morphology

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in this survey area. These descriptions are available on the Web at http://soils.usda.gov.

Descriptions for higher level taxonomic units recognized in this survey area are provided below. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small three-dimensional area of soil, typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (Soil Survey Division Staff 1993). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (Soil Survey Staff 1999) and in *Keys to Soil Taxonomy* (Soil Survey Staff 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

## Alic Haplocryands

#### **Taxonomic Classification**

Alic Haplocryands

## Setting

Depth class: moderately deep to very deep

Drainage class: well drained Landforms: mountains

Landionnis. mountains

Parent material: volcanic ash over till

Elevation: 560 to 3,770 feet Slope: 25 to 100 percent

Annual precipitation: 20 to 60 inches Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

## **Typical Pedon Location**

Map unit in which located: Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, steep in the Western Kenai Peninsula Area, Alaska

Location in survey area: NW¼ of sec. 7, T. 5 S., R. 9 W., of the Seward Meridian; UTM north 6626412 and east 619353, Zone 5, about a half mile west of Bradley Lake Dam.

## **Typical Pedon**

- Oe—0 to 4 inches; very dark grayish brown (10YR 3/2) moderately decomposed plant material; many very fine, fine, and medium roots; very strongly acid; clear wavy boundary.
- A—4 to 7 inches; dark brown (10YR 3/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many very fine, fine, and common medium roots; 5 percent gravel; very strongly acid; clear wavy boundary
- Bw—7 to 21 inches; very dark brown (10YR 2/2) silt loam; moderate fine granular structure; very friable nonsticky and nonplastic; common very fine, fine, few medium roots; 10 percent gravel; strongly acid; clear wavy boundary.

2C—21 to 32 inches; light olive brown (2.5Y 5/3) very gravelly sandy loam; massive; friable, nonsticky and nonplastic; few very fine and fine roots; 40 percent gravel, 5 percent cobbles; moderately acid.

R-32 inches; hard bedrock.

## Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 35 degrees F.

Depth to bedrock (lithic): 20 to 60 inches

Oe horizon:

Reaction—extremely acid to very strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 35 percent gravel, 0 to 5 percent cobbles

Reaction—very strongly acid or strongly acid

B horizon:

Color—hue from 5YR to 10YR; value of 2 or 4; chroma of 1 to 4

Texture—very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 35 percent gravel, 0 to 5 percent cobbles

Reaction—very strongly acid or strongly acid

2C horizon:

Color—hue of 2.5Y or 5Y; value of 4 to 6; chroma of 1 to 3

Texture—fine sandy loam, sandy loam or silt loam modified by 10 to 50 percent total coarse fragments; 10 to 50 percent gravel, 0 to 10 percent cobbles, 0 to 5 percent stones

Reaction—very strongly acid to moderately acid

## **Aquic Cryofluvents**

#### **Taxonomic Classification**

Aquic Cryofluvents

Depth class: very deep

Drainage class: somewhat poorly drained

Landforms: alluvial fans, channels on alluvial plains

Parent material: alluvium Elevation: 0 to 330 feet Slope: 0 to 2 percent

Annual precipitation: 15 to 30 inches Annual temperature: 0 to 37 degrees F. Frost-free period: 75 to 120 days

## **Typical Pedon Location**

Map unit in which located: Aquic Cryofluvents, 0 to 2 percent slopes in the Western Kenai Peninsula Area, Alaska

Location in survey area: NE4SE4 sec. 24, T. 4 S., R. 10 W., of the Seward Meridian; UTM north 6632532 and east 616328, zone 5, in the Fox River Valley.

- Oi—0 to 2 inches; very dark grayish brown (10YR 3/2) slightly decomposed plant material; many fine roots; extremely acid; clear smooth boundary.
- A—2 to 6 inches; dark gray (2.5Y 4/1) silt loam; common fine faint dark grayish brown (2.5Y 4/2) mottles; weak fine subangular block structure; friable, nonsticky and nonplastic; many fine roots; moderately acid; clear smooth boundary.
- Cg1—6 to 16 inches; dark gray (2.5Y 4/1) silt loam; common fine faint very dark grayish brown (2.5Y 3/2) mottles; massive; friable, nonsticky and nonplastic; few fine roots; moderately acid; clear wavy boundary.
- Cg2—16 to 27 inches; dark gray (2.5Y 4/1) silt loam; massive; friable, nonsticky and nonplastic; few fine roots; common fine distinct dark yellowish brown (10YR 4/4) redoximorphic concentrations and few fine prominent strong brown (7.5YR 5/6) concentrations; moderately acid; gradual wavy boundary.
- Cg3—27 to 31 inches; gray (2.5Y 5/1) silt loam; massive; friable, nonsticky and nonplastic; few fine roots; common fine prominent yellowish brown (5YR 5/8) redoximorphic concentrations and few fine faint dark grayish brown (2.5Y 5/2) redoximorphic depletions; moderately acid; gradual wavy boundary.
- Cg4—31 to 48 inches; dark gray (2.5Y 4/1) and dark grayish brown (2.5Y 4/2) stratified silt loam, fine sandy loam, and sand; massive; very friable, nonsticky and nonplastic; moderately acid; clear wavy boundary.
- 2Cq5—48 to 60 inches; dark grayish brown (2.5Y 4/2) grayelly sand; single grain; loose, nonsticky and nonplastic; 15 percent gravel; moderately acid.

#### Range in Characteristics

Soil moisture class: oxyaquic

Average annual soil temperature: 33 degrees F.

Depth to sands and gravels: 15 to greater than 40 inches

#### Oi horizon:

Color—hue of 10YR or 2.5Y; value of 2 or 3; chroma of 1 to 3 Organic matter content—85 to 95 percent Reaction—extremely acid to strongly acid

## A horizon:

Color—hue of 2.5Y or 5Y; value of 4 or 5; chroma of 1 or 2 Texture—silt loam, very fine sandy loam Reaction—very strongly acid to moderately acid

## Cg horizons:

Color—hue of 2.5Y to N; value of 2.5 to 5; chroma of 1 or 2 Redoximorphic features—hue of 5YR to 5Y; value of 3 to 5; chroma of 2 to 8 Texture—silt loam, very fine sandy loam, stratified silt loam, fine sandy loam, and sand Reaction—very strongly acid to moderately acid

## 2Cg horizon:

Color—hue of 2.5Y to N; value of 2.5 to 5; chroma of 1 or 2 Texture—loamy sand and sand modified by 0 to 25 percent total coarse fragments; 10 to 25 percent gravel, 0 to 10 percent cobbles Reaction—very strongly acid to moderately acid

## **Dystrocryepts**

#### **Taxonomic Classification**

Dystrocryepts

Depth class: very deep Drainage class: well drained

Landforms: hills, moraines on till plains

Parent material: ash-influenced gravelly glaciofluvial deposits over sandy and gravelly

glaciofluvial deposits

Elevation: 1,670 to 2,700 feet

Slope: 4 to 25 percent

Annual precipitation: 20 to 40 inches Annual temperature: 34 to 37 degrees C

Frost-free period: 90 to 120 days

## **Typical Pedon Location**

Map unit in which located: Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes in the Western Kenai Area, Alaska

Location in survey area: NW¼SW¼ sec. 33, T. 2 S., R. 11 W., of the Seward Meridian; Seldovia D4 SE 1:25,000 quad; UTM north 6648273 and east 601194, zone 5, about one mile north of Cytex Creek.

- Oi—0 to 2 inches; very dark brown (10YR 2/2) slightly decomposed plant material; many very fine, fine, and medium roots; extremely acid; abrupt smooth boundary.
- A—2 to 7 inches; very dark brown (7.5YR 2.5/3) very gravelly fine sandy loam; weak fine granular structure; very friable, nonsticky and nonplastic; 50 percent gravel, 2 percent cobbles; very strongly acid; abrupt smooth boundary.
- Bw—7 to 17 inches; dark yellowish brown (10YR 3/4) and dark yellowish brown (10YR 4/4) extremely gravelly loamy sand; single grain; very friable, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.
- BC—17 to 23 inches; dark olive brown (2.5Y 3/3) extremely gravelly loamy sand; single grain; very friable, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.
- C—23 to 60 inches; olive (5Y 3/3) extremely gravelly sand; single grain; loose, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.

## Range in Characteristics

Average annual soil temperature: 34 degrees F.

Oi horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3 Organic matter content—85 to 95 percent Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—sandy loam, fine sandy loam, silt loam or very fine sandy loam modified by 0 to 55 percent total coarse fragments; 5 to 55 percent gravel, 0 to 4 percent cobbles, 0 to 4 percent stones

Reaction—very strongly acid to strongly acid

Bw horizon:

Color—hue of 10YR or 2.5Y; value of 2 to 4; chroma of 2 to 4

Texture—fine sandy loam, loamy sand modified by 25 to 70 percent total coarse fragments; 25 to 70 percent gravel, 0 to 3 percent cobbles, 0 to 2 percent stones Reaction—very strongly acid or strongly acid

C or BC horizons:

Color-hue of 10YR to 5Y; value of 3 to 5; chroma of 1 to 4

Texture—loamy sand, fine sandy loam, sand modified by 25 to 70 percent total coarse fragments; 25 to 70 percent gravel, 0 to 35 percent cobbles, 0 to 25 percent stones Reaction—very strongly acid or strongly acid

## Lithic Haplocryands

#### **Taxonomic Classification**

Lithic Haplocryands

Depth class: very shallow or shallow

Drainage class: well drained Landforms: mountains

Parent material: volcanic ash over till

Elevation: 560 to 3,770 feet Slope: 25 to 100 percent

Annual precipitation: 20 to 60 inches
Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

## **Typical Pedon Location**

Map unit in which located: Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, steep in the Western Kenai Area, Alaska

Location in survey area: SE¼SE¼ sec. 31, T. 4 S., R. 9 W., of the Seward Meridian; Seldovia D3 SE 1:25,000 quad; UTM east 619112, north 6628632, Zone 5, about a quarter mile west of Bradley River.

- Oi—0 to 1 inch; dark brown (10YR 3/2) slightly decomposed plant material; many very fine, fine, and common medium roots; extremely acid; abrupt smooth boundary.
- Oa—1 to 2 inches; very dark brown (10YR 2/2) highly decomposed plant material; many very fine, fine, and common medium roots; extremely acid; abrupt smooth boundary.
- A—2 to 7 inches; very dark brown (10YR 2/2) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many very fine, fine, and common medium roots; 5 percent gravel; extremely acid; clear smooth boundary.
- Bw1—7 to 9 inches; very dark brown (7.5YR 2.5/2) gravelly silt loam; moderate medium granular structure; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 15 percent gravel; extremely acid; clear smooth boundary.
- Bw2—9 to 12 inches; dark brown (10YR 3/3) silt loam; moderate medium granular structure; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 10 percent gravel; extremely acid; abrupt smooth boundary.
- R—12 inches; fractured bedrock.

## Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

Depth to bedrock (lithic): 8 to 19 inches

Oi horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—slightly decomposed plant material, moderately decomposed plant material,

or highly decomposed plant material Organic matter content—85 to 95 percent Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—silt loam or very fine sandy loam modified by 0 to 45 percent total coarse fragments; 10 to 45 percent gravel, 0 to 10 percent cobbles

Reaction—extremely acid to strongly acid

B horizon:

Color—hue of 5YR to 10YR; value of 2 to 4; chroma of 2 to 4

Texture—silt loam or very fine sandy loam modified by 0 to 45 percent total coarse fragments; 10 to 45 percent gravel, 0 to 10 percent cobbles

Reaction—extremely acid to strongly acid

## **Typic Cryaquands**

#### **Taxonomic Classification**

Typic Cryaquands

Depth class: shallow to deep Drainage class: poorly drained

Landforms: mountains

Parent material: volcanic ash over till

Elevation: 5 to 3,700 feet Slope: 0 to 25 percent

Annual precipitation: 20 to 60 inches Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

#### **Typical Pedon Location**

Map unit in which located: Tutka-Portgraham complex, hilly to steep in the Western Kenai Area, Alaska

Location in survey area: NE¼SE¼ sec. 35 T. 4 S., R. 11 W., of the Seward Meridian; Seldovia D3 SW 1:25,000 quad; UTM north 6628980 and east 606041, Zone 5, about a quarter mile east of Falls Creek.

Oi—0 to 3 inches; very dark brown (10YR 3/2) slightly decomposed plant material; extremely acid; abrupt smooth boundary.

A—3 to 7 inches; very dark grayish brown (10YR 3/2) silt loam; weak medium granular structure; very friable, slightly sticky and nonplastic; very strongly acid; clear smooth boundary.

Bw—7 to 26 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable, slightly sticky and nonplastic; 2 percent gravel, 2 percent cobbles; moderately acid; abrupt smooth boundary.

R-27 inches; fractured bedrock.

## Range in Characteristics

Soil moisture class: aquic

Average annual soil temperature: 33 degrees F.

Depth to bedrock (lithic): 22 to 50 inches

Oi horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3 Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

A horizon:

Color-hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—silt loam or very fine sandy loam modified by 0 to 40 percent total coarse fragments; 0 to 10 percent gravel, 0 to 15 percent cobbles, 0 to 15 percent stones Reaction—very strongly acid to strongly acid

B horizon:

Color—hue of 7.5YR or 10YR; value of 3 to 5; chroma of 2 to 4

Texture—silt loam or very fine sandy loam modified by 0 to 40 percent total coarse fragments; 0 to 10 percent gravel, 0 to 15 percent cobbles, 0 to 15 percent stones Reaction—very strongly acid to moderately acid

## **Typic Cryaquents**

## **Taxonomic Classification**

Typic Cryaquents

Depth class: very deep

Drainage class: very poorly drained

Landforms: deltas, estuaries

Parent material: silty and clayey over sandy and silty marine deposits

Elevation: 1 to 200 feet Slope: 0 to 2 percent

Annual precipitation: 15 to 30 inches Annual temperature: 33 to 37 degrees F.

Frost-free period: 85 to 120 days

## **Typical Pedon Location**

Map unit in which located: Typic Cryaquents, 0 to 2 percent slopes in the Western Kenai Area, Alaska

Location in survey area: SE¼SW¼ sec. 3 T. 5 S., R. 10 W., of the Seward Meridian; Seldovia D3 SW 1:25,000 quad; UTM north 6627217 and east 614181, Zone 5, about a half mile north of Battle Creek.

Oi—0 to 2 inches; very dark gray (10YR 3/1) slightly decomposed plant material common very fine and fine roots; slightly acid; abrupt smooth boundary.

- Cg—2 to 6 inches; very dark gray (5Y 3/1) silt loam; massive; very friable, slightly sticky and slightly plastic; common very fine and fine roots; 10 percent 4 mm prominent brown (7.5YR) redoximorphic concentrations; neutral; gradual wavy boundary.
- C—6 to 60 inches; very dark gray (2.5Y 3/1) very gravelly sand; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; 40 percent gravel, 10 percent cobbles; moderately alkaline.

## Range in Characteristics

Soil moisture class: aquic

Average annual soil temperature: 33 degrees F. Depth to sands and gravel: 5 to greater than 60 inches

Oi horizon:

Color—value of 2 or 3; chroma of 1 to 3 Organic matter content—75 to 90 percent Reaction—moderately acid to neutral

Cg horizon:

Color—hue of 10YR to 5Y; value of 3 or 4; chroma of 1 or 2 Redoximorphic concentrations—hue of 7.5YR or 10YR; value of 3 or 4; chroma of 3 to 6 Texture—silty loam or very fine sandy loam Reaction—slightly acid to moderately alkaline

C horizon:

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma of 1 to 4
Texture—sandy loam, loamy sand, sand or silt loam modified by 0 to 55 percent total coarse fragments; 0 to 50 percent gravel, 0 to 30 percent cobbles
Reaction—slightly alkaline to moderately alkaline

## **Typic Cryopsamments**

## **Taxonomic Classification**

Typic Cryopsamments

Depth class: very deep

Drainage class: excessively drained Landforms: dunes on coastal plains

Parent material: beach sand Elevation: 3 to 262 feet Slope: 3 to 45 percent

Annual precipitation: 20 to 29.5 inches Annual temperature: 34 to 36 degrees C Frost-free period: 85 to 115 days

## **Typical Pedon Location**

Map unit in which located: Typic Cryopsamments, 3 to 45 percent slopes in the Western Kenai Peninsula Area, Alaska

Location in survey area: NE¼NW¼ sec. 2 T. 3 N., R. 12 W., of the Seward Meridian; Kenai B4 1:25,000 quad; UTM north 6695358 and east 592927, Zone 5, about one mile west of the Kasilof River.

A—0 to 1 inch; dark grayish brown (10YR 4/2) loamy sand; single grain; loose, nonsticky and nonplastic; many very fine and fine, many medium and common coarse roots; slightly acid; abrupt smooth boudary.

C—1 to 60 inches; varigated sand; single grain; loose, nonsticky and nonplastic; many very fine and fine and common medium roots; neutral.

## Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

C horizon:

Color—hue of 10YR or 2.5Y; value of 3 to 5; chroma of 1 to 3 Texture—loamy fine sand, loamy sand or sand Reaction—moderately acid to neutral

## **Typic Cryorthents**

#### **Taxonomic Classification**

Typic Cryorthents

Depth class: very deep Drainage class: well drained

Landforms: hills, sea cliffs, and terraces Parent material: debris slide deposits

Elevation: 0 to 1,430 feet Slope: 15 to 150 percent

Annual precipitation: 20 to 30 inches Annual temperature: 33 to 39 degrees F. Frost-free period: 90 to 130 days

#### **Typical Pedon Location**

Map unit in which located: Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes in the Western Kenai Area, Alaska

Location in survey area: SE¼SW¼ sec. 7 T. 3 S., R. 10 W., of the Seward Meridian; Seldovia D3 NW 1:25,000; UTM north 6644917 and east 608715, Zone 5, about one and a half miles north of Caribou Lake.

- Oi—0 to 1 inch; very dark grayish brown (10YR 3/2) gravelly slightly decomposed plant material; common very fine, fine, and few medium roots; 25 percent gravel, 2 percent cobbles, 1 percent stones; extremely acid; abrupt smooth boundary.
- C1—1 to 33 inches; olive gray (5Y 5/2) gravelly very fine sandy loam; massive; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 25 percent gravel, 2 percent cobbles, 1 percent stones; very strongly acid; gradual smooth boundary.
- C2—33 to 60 inches; olive gray (5Y 4/2) and dark grayish brown (2.5Y 4/2) very gravelly silt loam; massive; friable, slightly sticky and nonplastic; fine roots 25 percent gravel, 15 percent cobbles, 2 percent stones; strongly acid.

#### Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

## Oi horizon:

Color-value of 2 or 3; chroma of 2 to 3

Texture—slightly decomposed plant material modified by 0 to 30 percent total coarse fragments, 0 to 30 percent gravel, 0 to 10 percent cobbles, 0 to 3 percent stones Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

## C horizons:

Color—hue of 2.5Y or 5Y; value of 3 to 5; chroma of 1 to 3

Texture—silty clay loam, very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 30 percent gravel, 0 to 20 percent cobbles, 0 to 3 percent stones

Reaction—very strongly acid to moderately alkaline

## Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff 1999). Soil formation is controlled by genetic and environmental factors of climate (including both temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

Climate, apart from its influence on soil properties, determines to a large extent the kind of vegetation that grows in a particular area. The vegetation, in turn, has a profound influence on soil characteristics. The degree of modification of the soil parent materials by climate and biologic forces and the degree of soil development depend largely on the length of time the soil-forming processes have been active. Local variations in relief also affect the nature and intensity of soil development. In low-lying areas, for example, a permanent high water table may cause the formation of a different kind of soil than those formed in well-drained uplands within the same general area.

## Parent material

The underlying bedrock of the survey area consists primarily of Tertiary sediments. This bedrock, in turn, is overlain by glacial, glaciofluvial, glaciolacustrine, alluvial, colluvial, and eolian deposits of late Quaternary age. The overall landscape of the western Kenai Peninsula area is the result of multiple glaciations. Evidence of three major ice inundations of late Pleistocene age is preserved in the western Kenai Peninsula area (Reger 2004).

Eolian deposits include several tephras erupted from volcanoes on the west side of Cook Inlet. The thickness of eolian deposits ranges from only a few inches to more than 40 inches. The Cohoe and Kachemak soils are examples of soils that formed in silty materials and volcanic ash overlying Tertiary sediments. The Mutnala soils are examples of soils that formed in silty material over glacial till. On the alluvial plains and in many of the upland depressions, the soils have formed in materials deposited by streams or washed in from the surrounding slopes. In many of the depressions, and in large remnant meltwater channels with underfit streams, organic soils formed from the accumulated remains of plants including mosses and sedges. Salamatof soils are examples of these organic soils

#### Climate

The survey area is characterized by cool summers and moderately cold winters. The rates of evaporation and transpiration are comparatively low, and as such, much of the precipitation percolates through the soil and is effective in leaching the upper soil horizons. Under the native vegetation, the well drained soils remain cool and moist during most of the summer.

## Vegetation

In this climate, the soils of the uplands for the most part support a forest of spruce and birch. There has been extensive mortality in spruce stands due to beetle infestation, resulting in encroachment of grasslands. The native vegetation on the well drained soils at higher elevations is mainly native grasses. A more open forest of willow, balsam poplar, and black spruce, in which there are many grassy areas, covers most of the somewhat poorly and poorly drained soils of the alluvial plains and upland depressions. Low shrubs and black spruce grow in the organic soils of the fens.

## Relief

The soils in this survey area are relatively young, and the effect of relief and topographic position, though considerable, is not as apparent as on older soils in other regions. On most, but not all, of the steep slopes the loess mantle is somewhat thinner than in more level areas. Soil development generally is about as equally advanced on the steep parts of uplands as it is on the gently sloping and nearly level areas. Most concave or depressional areas, however, are poorly drained, and the soils exhibit characteristics related to wetness.

## Time

All of the soils of the survey area developed in the relatively short period of time that has elapsed since the last glaciers receded from the survey area. The development of major soil horizons is well advanced in most well drained soils of the uplands, but wetter soils show little profile development.

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# **Glossary**

- **Ablation till.** Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
- **Aeration**, **soil**. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- **Aggregate**, **soil**. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- **Alluvial cone.** The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.
- **Alluvial fan.** The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.
- **Alluvium.** Material, such as sand, silt, or clay, deposited on land by streams.
- **Alpha,alpha-dipyridyl.** A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.
- **Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- **Aspect.** The direction in which a slope faces.
- **Association**, **soil**. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.
- Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

| Very low  | 0 to 3       |
|-----------|--------------|
| Low       | 3 to 6       |
| Moderate  | 6 to 9       |
| High      | 9 to 12      |
| Very high | more than 12 |

- **Backslope.** The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.
- **Basal area.** The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.
- Basal till. Compact glacial till deposited beneath the ice.

**Base saturation.** The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

- **Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- **Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- Boulders. Rock fragments larger than 2 feet (61 cm) in diameter.
- **Breaks.** The steep and very steep broken land at the border of an upland summit that is dissected by ravines.
- **Breast height.** An average height of 4.5 feet (1.4 m) above the ground surface; the point on a tree where diameter measurements are ordinarily taken.
- **Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- **Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
- **Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.
- **Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- **Channery soil material.** Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 cm) along the longest axis. A single piece is called a channer.
- **Cirque.** A semicircular, concave, bowllike area that has steep faces primarily resulting from glacial ice and snow abrasion.
- **Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- **Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
- **Coarse textured soil.** Sand or loamy sand. Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) in diameter.
- **Cobbly soil material.** Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 cm) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- **COLE** (coefficient of linear extensibility). See Linear extensibility.
- **Colluvium.** Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
- **Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- **Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- **Concretions.** Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

- Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- **Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- **Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the *Soil Survey Manual*.
- **Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 cm) and 40 or 80 inches (102 or 203 cm).
- **Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- **Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- **Cropping system.** Growing crops according to a planned system of rotation and management practices.
- **Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- **Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- **Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).
- Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the Soil Survey Manual.
- Drainage, surface. Runoff, or surface flow of water, from an area.
- **Draw.** A small stream valley that generally is more open and has broader bottom land than a ravine or gulch.
- **Drumlin.** A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

**Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

- **Ecological site.** An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.
- **Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- **Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters (7 ft) are saturated.
- **Eolian soil material.** Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.
- **Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters (7 feet) of the surface.
- **Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
- **Erosion (geologic)**. Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
- **Erosion (accelerated).** Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- **Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.
- **Esker.** A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.
- **Fan terrace.** A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.
- **Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- **Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of fiber that is well preserved and readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- **Field moisture capacity.** The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity, or capillary capacity.*
- Fine-textured soil. Sandy clay, silty clay, or clay.
- **Flaggy soil material.** Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.
- **Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 cm) long.
- **Flood plain.** A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.
- **Fluvial.** Of or pertaining to rivers; produced by river action, as a fluvial plain.
- **Foothill.** A steeply sloping upland that has relief of as much as 1,000 feet (305 m) and fringes a mountain range or high-plateau escarpment.

- **Footslope.** The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb. Any herbaceous plant not a grass or a sedge.
- **Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- **Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- **Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- **Glacial drift.** Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.
- **Glacial outwash.** Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.
- **Glacial till.** Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.
- **Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.
- **Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.
- **Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- **Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- **Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 mm to 7.6 cm) in diameter. An individual piece is a pebble.
- **Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 cm) in diameter.
- **Ground water**. Water filling all the unblocked pores of the material below the water table.
- **Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- **Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- **High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- **Hill.** A natural elevation of the land surface, rising as much as 1,000 feet (305 m) above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.
- **Horizon, soil.** A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase

letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the *Soil Survey Manual*. The major horizons of mineral soil are as follows:

- *O horizon.*—An organic layer of fresh and decaying plant residue.
- A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.
- *E horizon.*—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.
- B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.
- C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.
- Cr horizon.—Soft, consolidated bedrock beneath the soil.
- *R layer.*—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.
- **Humus.** The well decomposed, more or less stable part of the organic matter in mineral soils.
- **Hydrologic soil groups.** Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.
- **Illuviation.** The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.
- **Infiltration.** The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.
- **Infiltration capacity**. The maximum rate at which water can infiltrate into a soil under a given set of conditions.
- **Infiltration rate.** The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.
- Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

| Less than 0.2 | very low        |
|---------------|-----------------|
| 0.2 to 0.4    | low             |
| 0.4 to 0.75   | moderately low  |
| 0.75 to 1.25  | moderate        |
| 1.25 to 1.75  | moderately high |
| 1.75 to 2.5   | high            |
| More than 2.5 | very high       |

**Interfluve.** An elevated area between two drainageways that sheds water to those drainageways.

**Intermittent stream.** A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

**Iron depletions.** Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Kame. An irregular, short ridge or hill of stratified glacial drift.

**Karst** (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

**Knoll.** A small, low, rounded hill rising above adjacent landforms.

**K**<sub>sat</sub>. Saturated hydraulic conductivity. (See Permeability.)

**Lacustrine deposit.** Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Landslide**. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Leaching.** The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.

**Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess.** Fine grained material, dominantly of silt-sized particles, deposited by wind. **Low strength.** The soil is not strong enough to support loads.

**Masses.** Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

**Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

**Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

**Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.

**Miscellaneous area.** An area that has little or no natural soil and supports little or no vegetation.

**Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

**Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

- **Moraine.** An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.
- **Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil. Irregular spots of different colors that vary in number and size.

  Descriptive terms are as follows: abundance—few, common, and many; size—fine, medium, and coarse; and contrast—faint, distinct, and prominent. The size measurements are of the diameter along the greatest dimension. Fine indicates less than 5 millimeters (about 0.2 in); medium, from 5 to 15 millimeters (about 0.2 to 0.6 in); and coarse, more than 15 millimeters (about 0.6 in).
- **Mountain.** A natural elevation of the land surface, rising more than 1,000 feet (305 m) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.
- **Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- **Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)
- **Nose slope.** A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.
- **Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.
- **Organic matter.** Plant and animal residue in the soil in various stages of decomposition.
- **Outwash plain.** A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.
- **Pan.** A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.
- Parent material. The unconsolidated organic and mineral material in which soil forms.
- **Peat.** Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)
- **Ped.** An individual natural soil aggregate, such as a granule, a prism, or a block.
- **Pedon.** The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square m to 10 square m), depending on the variability of the soil.
- **Percolation.** The movement of water through the soil.
- Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the *Soil Survey Manual*. In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

| Extremely slow   | 0.0 to 0.01 inch       |
|------------------|------------------------|
| Very slow        | 0.01 to 0.06 inch      |
| Slow             | 0.06 to 0.2 inch       |
| Moderately slow  | 0.2 to 0.6 inch        |
| Moderate         | 0.6 inch to 2.0 inches |
| Moderately rapid | 2.0 to 6.0 inches      |
| Rapid            | 6.0 to 20 inches       |
| Very rapid       | more than 20 inches    |

**Phase, soil.** A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

**pH value.** A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.) **Plasticity index.** The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

**Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

**Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

**Potential rooting depth (effective rooting depth).** Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

**Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.

**Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.

**Proper grazing use.** Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

**Rangeland.** Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

**Reaction, soil.** A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

| Ultra acid             | less than 3.5  |
|------------------------|----------------|
| Extremely acid         | 3.5 to 4.4     |
| Very strongly acid     | 4.5 to 5.0     |
| Strongly acid          | 5.1 to 5.5     |
| Moderately acid        | 5.6 to 6.0     |
| Slightly acid          | 6.1 to 6.5     |
| Neutral                | 6.6 to 7.3     |
| Slightly alkaline      | 7.4 to 7.8     |
| Moderately alkaline    | 7.9 to 8.4     |
| Strongly alkaline      | 8.5 to 9.0     |
| Very strongly alkaline | 9.1 and higher |

**Redoximorphic concentrations.** Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

**Redoximorphic depletions.** Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

- **Redoximorphic features.** Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha, alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.
- **Reduced matrix.** A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.
- **Relief.** The elevations or inequalities of a land surface, considered collectively. **Residuum (residual soil material).** Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.
- **Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
- **Root zone.** The part of the soil that can be penetrated by plant roots.
- **Runoff.** The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.
- **Sand.** As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
- Sandstone. Sedimentary rock containing dominantly sand-sized particles.
- **Sapric soil material (muck).** The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
- **Saturation.** Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
- **Sedimentary rock.** Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.
- **Sequum.** A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)
- **Series**, **soil**. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
- **Shale.** Sedimentary rock formed by the hardening of a clay deposit.
- **Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- **Shoulder.** The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.
- **Side slope.** A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.
- **Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
- Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

- **Similar soils.** Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
- **Site index.** A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
- **Slope.** The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

| Nearly level       | 0 to 2 percent       |
|--------------------|----------------------|
| Gently sloping     | 2 to 4 percent       |
| Moderately sloping | 4 to 8 percent       |
| Strongly sloping   | 8 to 15 percent      |
| Moderately steep   | 15 to 25 percent     |
| Steep              | 25 to 45 percent     |
| Very steep         | More than 45 percent |

- **Sloughed till.** Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.
- **Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- **Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.
- **Soil separates.** Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

| Very coarse sand | 2.0 to 1.0      |
|------------------|-----------------|
| Coarse sand      | 1.0 to 0.5      |
| Medium sand      | 0.5 to 0.25     |
| Fine sand        | 0.25 to 0.10    |
| Very fine sand   | 0.10 to 0.05    |
| Silt             | 0.05 to 0.002   |
| Clay             | less than 0.002 |

- **Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- **Stone line.** A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.
- **Stones.** Rock fragments 10 to 24 inches (25 to 60 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.
- **Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- **Structure, soil.** The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either

single grained (each grain by itself, as in dune sand) or massive (the particles adhering without any regular cleavage, as in many hardpans).

- **Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth. **Substratum.** The part of the soil below the solum.
- **Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer. **Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.
- **Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 cm). Frequently designated as the "plow layer," or the "Ap horizon."
- **Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- **Talus.** Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.
- **Tephra.** Materials of all types and sizes that are erupted from a volcano and deposited from the air.
- **Terminal moraine.** A belt of thick glacial drift that generally marks the termination of important glacial advances.
- **Terrace.** An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- **Terrace** (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.
- **Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- **Till plain.** An extensive area of nearly level to undulating soils underlain by glacial till. **Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- **Toeslope.** The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.
- **Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- **Upland.** Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.
- **Valley fill.** In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.
- **Variegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.
- **Weathering.** All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.
- **Well graded.** Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

**Wilting point (or permanent wilting point).** The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

## **Plates**



**Plate 1.** Kachemak soils (map unit 575) are the dominant soils on the rolling hills of the Diamond Ridge area. Cook Inlet and the Alaska Range are in the background.



**Plate 2.** Coalesced alluvial fans form the Homer Bench. Beluga and Smokey Bay soils (map unit 703) formed in slope alluvium derived from the bluffs of the Kenai Formation in the background.



**Plate 3.** Grazing occurs at the head of Kachemak Bay on Typic Cryaquents (map unit 701) in the foreground. Tutka-Portgraham complex, hilly to steep, (map unit 697) occurs on the mountain slopes in the background.



**Plate 4.** Deep Creek cuts through glacial drift and into the underlying Kenai Formation. Killey and Moose River soils (map unit 611) occupy the valley bottom.



**Plate 5.** Kachemak soils (map unit 577) occur on the south slopes of the Boxcar Hills. Mutnala and Starichkof soils (map unit 623) are at the base of these hills.



**Plate 6.** Dystrocryepts and Typic Cryorthents (map unit 560) are at the higher elevations of the Caribou Hills.



**Plate 7.** Starichkof soils (map unit 677) are in large remnant meltwater channels with small underfit streams.



**Plate 8.** Soldotna soils (map unit 659) occur on large, nearly level, outwash plains and deltaic deposits.



Plate 9. Typic Cryopsamments (map unit 702) occur on dunes overlying glacial till.

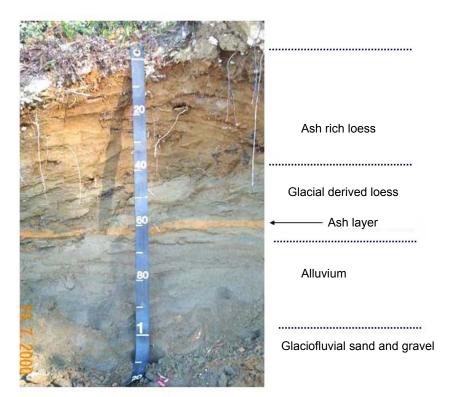


Plate 10. Ash observed in a profile of Soldotna soils near the town of Soldotna.



**Plate 11.** Profile of Naptowne silt loam. The silty mantle extends to about 27.5 inches (70 cm) over glacial till.

**Plate 12.** Profile of Cohoe silt loam. The silty eolian mantle extends to about 51 inches (130 cm) over glacial drift.



**Plate 13.** Profile of Redoubt silt loam. The thick dark Bhs horizons at 10 to 18.5 inches (25-47 cm) have organic carbon content well above 6 percent.



**Plate 14.** Redoubt soils (map unit 644) commonly occur under an open canopy of mixed birch and spruce forest.

## **Tables**

Table 1. Temperature and Precipitation at Kenai, Alaska

TAPS Station: KENAI FAA AIRPORT, AK4546

Start yr. - 1971 End yr. - 2000

Temperature: 30 years available out of 30 requested in this analysis Precipitation: 30 years available out of 30 requested in this analysis

|                     | Temperature (Degrees F.) |                        |           |                        |                                                                                                                                                                                          | Precipitation (Inches) |           |               |               |                       |              |
|---------------------|--------------------------|------------------------|-----------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|---------------|---------------|-----------------------|--------------|
|                     |                          |                        |           |                        | in 10<br>have                                                                                                                                                                            | <br> avg # <br> of     |           | 2 yrs<br>will | in 10<br>have | avg<br> # of<br> days | avg<br>total |
| Month               | avg<br> daily<br>  max   | avg<br> daily<br>  min | avg       |                        | min<br> temp.<br>  <than< td=""><td>grow<br/> deg<br/> days*</td><td>avg</td><td>less<br/>than</td><td>more<br/>than</td><td> w/.1<br/>  or<br/> more</td><td>snow<br/>fall</td></than<> | grow<br> deg<br> days* | avg       | less<br>than  | more<br>than  | w/.1<br>  or<br> more | snow<br>fall |
| T                   | 1 21 2                   | 5.3                    | 1 1 2 2   | 1 40                   | -37                                                                                                                                                                                      |                        | 1.07      | 0.37          | 1 72          | 3                     | 9.2          |
| January<br>February | 21.2                     | 7.3                    | 13.2      | 42<br>  43             | -37<br>  -29                                                                                                                                                                             | 0 <br>  0              | 0.91      | 0.37          | 1.73          | 3  <br>  2            | 9.2          |
| March               | 32.8                     | 14.2                   | 23.5      | 43<br>  46             | -29<br>  -22                                                                                                                                                                             | 0 <br>  0              | 0.91      | 0.41          |               | !                     | 9.1<br>8.3   |
| April               | 32.6                     | 26.4                   | 34.4      | 40<br>  57             | -22<br>  3                                                                                                                                                                               | 1 14                   |           | 0.22          |               | - 1                   | 2.8          |
| May                 | 52.7                     | 35.8                   | 44.2      | l 69                   | 3<br>  21                                                                                                                                                                                | 142                    |           | 0.18          | 1.52          | <u>+</u>  <br>  3     | 0.2          |
| May<br>June         | 58.5                     | 43.0                   | 50.8      | 09<br>  74             | 21<br>  31                                                                                                                                                                               | 321                    |           | 0.54          | 1.65          | 3                     | 0.2          |
| July                | 62.0                     | 47.8                   | 54.9      | 7 <del>1</del><br>  77 | 31<br>  31                                                                                                                                                                               | 459                    |           | 0.88          | 2.58          | 1                     | 0.0          |
| August              | 61.6                     | 46.0                   | 53.8      | 77<br>  76             | 31<br>  31                                                                                                                                                                               | 439                    |           | 1.43          | 3.78          | 1                     | 0.0          |
| September           | 54.6                     | 38.8                   | 46.7      | 76<br>  66             | 1 18                                                                                                                                                                                     | 213                    |           | 2.17          |               | ! ' !                 | 0.1          |
| October             | 41.0                     | 27.5                   | 34.3      | l 55                   | 1 2                                                                                                                                                                                      | 213                    |           | 1.61          | 3.52          | 6  <br>  6            | 6.2          |
| November            | 28.9                     | 14.4                   | 21.7      | 1 45                   | -16                                                                                                                                                                                      | 1 1                    |           | 0.52          | 2.74          | !                     | 11.5         |
| December            | 23.6                     | 8.8                    | 16.2      | 42                     | -26                                                                                                                                                                                      | 0                      | 1.45      | 0.63          | 2.16          | 4                     | 13.4         |
| Yearly :            | <br> <br>                | <br> <br>              | <br> <br> | <br> <br>              | <br> <br>                                                                                                                                                                                | <br>  <br>             | <br> <br> | <br>          | <br> <br>     | <br> <br>             |              |
| Average             | 42.1                     | 26.3                   | 34.2      |                        |                                                                                                                                                                                          |                        |           |               |               |                       |              |
| Extreme             | <br>  86<br>             | <br>  -47<br>          | <br> <br> | <br>  79<br>           | <br>  -37<br>                                                                                                                                                                            | <br>   <br>            | <br>      | <br> <br>     | <br>          | <br>    <br>          |              |
| Total               | <br>                     | <br>                   |           | <br>                   | <br>                                                                                                                                                                                     | 1603                   | 18.93     | 16.14         | 21.59         | 48                    | 60.8         |

Average number of days per year with at least 1 inch of snow on the ground: 145

<sup>\*</sup>A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold:  $40.0 \ \text{deg. F}$ )

Table 2. Temperature and Precipitation at Homer, Alaska

TAPS Station: HOMER WSO AIRPORT, AK3665

Start yr. - 1971 End yr. - 2000
Temperature: 30 years available out of 30 requested in this analysis
Precipitation: 30 years available out of 30 requested in this analysis

|                      | Temperature (Degrees F.) |                       |                |                                             |                                                                                                                                                      |                      | <br>  Precipitation (Inches) |                             |                |                     |              |
|----------------------|--------------------------|-----------------------|----------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------|-----------------------------|----------------|---------------------|--------------|
|                      |                          |                       |                | 2 yrs in 10  <br>will have   avg.<br>  # of |                                                                                                                                                      | <br> <br> <br>       | 2 yrs in 10<br>will have     |                             | avg            | avg total           |              |
| Month                | avg daily max.           | avg<br>daily<br>min.  | avg            | max<br>  temp.<br> >than                    | min<br>  temp.<br>  <than< th=""><th>grow avg less mo</th><th>more than</th><th>  w/ .1  <br/>  or  <br/>  more  </th><th>snow<br/>fall</th></than<> | grow avg less mo     | more than                    | w/ .1  <br>  or  <br>  more | snow<br>fall   |                     |              |
| January              | <br>  29.3               | <br>  17.5            | <br>  23.4     | <br>  46                                    | <br> -12                                                                                                                                             | <br>  1              | <br>  2.64                   | <br>  1.10                  | <br>  4.09     | <br>  7             | <br>  9.9    |
| February             | 31.4                     | 18.3                  | 24.8           | 46                                          | -7                                                                                                                                                   | 1                    | 2.02                         | 0.78                        | 3.22           | 5                   | 12.2         |
| March                | 36.3                     | 22.5                  | 29.4           | 48                                          | -2                                                                                                                                                   | 1                    | 1.86                         | 0.50                        | 3.23           | 5                   | 10.2         |
| April                | 43.4                     | 29.3                  | 36.3           | 56                                          | 12                                                                                                                                                   | 17                   | 1.17                         | 0.50                        | 1.75           | 3                   | 3.5          |
| May                  | 50.5                     | 36.6                  | 43.6           | 64                                          | 23                                                                                                                                                   | 123                  | 1.07                         | 0.44                        | 1.67           | 3                   | 0.4          |
| June                 | 57.0                     | 42.9                  | 50.0           | 70                                          | 33                                                                                                                                                   | 299                  | 0.96                         | 0.59                        | 1.29           | 3                   | 0.0          |
| July                 | 60.9                     | 47.2                  | 54.1           | 72                                          | 33                                                                                                                                                   | 437                  | 1.45                         | 0.69                        | 2.14           | 4                   | 0.0          |
| August               | 60.8                     | 46.7                  | 53.8<br>  47.9 | 72<br>  65                                  | 36<br>  23                                                                                                                                           | 426<br>  240         | 2.28<br>  3.37               | 1.29<br>  2.19              | 3.29           | 6<br>  8            | 0.0          |
| September<br>October | 54.8<br>  44.1           | 40.9<br>  31.4        | 47.9<br>  37.8 | 65<br>  55                                  | 23<br>  12                                                                                                                                           | 240<br>  44          | 3.37<br>  2.77               | 2.19<br>  1.46              | 4.51<br>  3.88 | 0<br>  8            | 0.0<br>  2.9 |
| November             | 35.2                     | 23.5                  | 29.4           | 33<br>  49                                  | 1 2                                                                                                                                                  | <del>44</del><br>  7 | 2.77<br>  2.88               | 0.93                        | 3.66<br>  4.58 | 0<br>  7            | 2.9<br>  8.5 |
| December             | 31.6                     | 20.0                  | 25.8           | 46                                          | -4                                                                                                                                                   | 7                    | 2.98                         | 0.97                        | 5.05           | <i> </i><br>  8     | 13.2         |
| Yearly :             | <br>                     | <br>                  | <br>           |                                             | <br>                                                                                                                                                 | <br>                 | <br>                         | <br>                        | <br>           |                     | <br>         |
| Average              | 44.6                     | <del></del><br>  31.4 | 38.0           | <br>                                        | <br>                                                                                                                                                 | <br>                 | <br>                         | <br>                        | <br>           |                     | <br>         |
| Extreme              | 81                       | <br>  -24             |                | 74                                          | <br>  -14                                                                                                                                            | <br>                 | <br>                         | <br>                        | <br>           | <br>                | <br>         |
| Total                | <br>                     | <br> <br>             | <br>           |                                             | <br> <br>                                                                                                                                            | 1598                 | 25.44                        | 19.95<br>                   | 29.78          | <del></del><br>  67 | 60.7         |

Average number of days per year with at least 1 inch of snow on the ground: 94

<sup>\*</sup>A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold: 40.0 deg. F).

Table 3. Probability of frost at Kenai, Alaska

FROST Station: KENAI FAA AIRPORT, AK4546

Start yr. - 1971 End yr. - 2000

Requested years of data: 30 Available years of data: 30

Spring:

Years of missing data
Years with no occurrence
Data years used

24 deg = 0, 28 deg = 0, 32 deg = 0
24 deg = 0, 28 deg = 0, 32 deg = 0
24 deg = 0, 28 deg = 30, 32 deg = 0
24 deg = 30, 28 deg = 30, 32 deg = 30

Fall:

Years of missing data Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 30, 28 deg = 30, 32 deg = 30

|                                      | <br>  Tempe<br> _        | <br>  Temperature<br>    |                         |  |  |  |
|--------------------------------------|--------------------------|--------------------------|-------------------------|--|--|--|
| Probability                          | i<br>  24°F or lower<br> | <br>  28°F or lower<br>_ | <br>  32°F or lower<br> |  |  |  |
| Last freezing temperature in spring: |                          |                          |                         |  |  |  |
| 1 year in 10 later than              | <br>  May 19             | June 3                   | June 18                 |  |  |  |
| 2 year in 10 later than              | May 10                   | <br>  May 25             | June 11                 |  |  |  |
| 5 year in 10 later than              | April 23                 | <br>  May 7              | <br>  May 28            |  |  |  |
| First freezing temperature in fall:  |                          |                          |                         |  |  |  |
| 1 yr in 10 earlier than              | <br> September 15        | <br> September 5         | August 23               |  |  |  |
| 2 yr in 10 earlier than              | <br> September 20        | <br> September 11        | August 28               |  |  |  |
| 5 yr in 10 earlier than              | <br> September 28<br>    | <br> September 22<br>    | <br> September 9<br>    |  |  |  |

Table 4. Probability of frost at Homer, Alaska

FROST Station: HOMER WSO AIRPORT, AK3665

Start yr. - 1971 End yr. - 2000

Requested years of data: 30 Available years of data: 30

Spring:

Fall:

Years of missing data Years with no occurrence Data years used  $24 \text{ deg} = 0, 28 \text{ deg} = 0, 32 \text{ deg} = 0 \\ 24 \text{ deg} = 0, 28 \text{ deg} = 0, 32 \text{ deg} = 0 \\ 24 \text{ deg} = 30, 28 \text{ deg} = 30, 32 \text{ deg} = 30$ 

|                                      | <br>  Temperatur    |               |                    |
|--------------------------------------|---------------------|---------------|--------------------|
| Probability                          | <br>  24°F or lower | 28°F or lower | 32°F or lower      |
| Last freezing temperature in spring: |                     | [<br>[        | <br>               |
| 1 year in 10 later than              | <br>  May 14        | <br>  May 28  | June 11            |
| 2 year in 10 later than              | <br>  May 3         | <br>  May 19  | June 3             |
| 5 year in 10 later than              | April 13            | May 2         | <br>  May 20       |
| First freezing temperature in fall:  |                     |               | <br>               |
| 1 yr in 10 earlier than              | October 7           | September 20  | <br>  September 10 |
| 2 yr in 10 earlier than              | October 11          | September 25  | <br>  September 15 |
| 5 yr in 10 earlier than              | October 20          | October 2     | <br>  September 24 |
|                                      |                     |               |                    |

Table 5. Growing Season at Kenai, Alaska

GROWTH Station: KENAI FAA AIRPORT, AK4546

Start yr. - 1971 End yr. - 2000

Requested years of data: 30 Available years of data: 30 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 30, 28 deg = 30, 32 deg = 30 Years with missing data Years with no occurrence

Data years used

|               | <br>  Daily Minimum<br> | Daily Minimum Temperature |                     |  |  |  |  |
|---------------|-------------------------|---------------------------|---------------------|--|--|--|--|
| Probability   | <br>  # days > 24°F     | <br>  # days > 28°F       | <br>  # days > 32°F |  |  |  |  |
| 9 years in 10 | 126                     | 103                       | <br>  72            |  |  |  |  |
| 8 years in 10 | 137                     | 115                       | 83                  |  |  |  |  |
| 5 years in 10 | 158                     | 137                       | 103                 |  |  |  |  |
| 2 years in 10 | 178                     | 159                       | 123                 |  |  |  |  |
| 1 year in 10  | 189                     | <br>  171                 | <br>  134           |  |  |  |  |
|               |                         | <br>_                     |                     |  |  |  |  |

Table 6. Growing Season at Homer, Alaska

GROWTH Station: HOMER WSO AIRPORT, AK3665

Start yr. - 1971 End yr. - 2000

Requested years of data: 30 Available years of data: 30

24 deg = 0, 28 deg = 0, 32 deg = 0 Years with missing data 24 deg = 0, 28 deg = 0, 32 deg = 0 24 deg = 30, 28 deg = 30, 32 deg = 30 Years with no occurrence Data years used

|               | <br>  Daily Minimum<br> | <br>  Daily Minimum Temperature<br> |                    |  |  |  |  |
|---------------|-------------------------|-------------------------------------|--------------------|--|--|--|--|
| Probability   | <br> # days > 24°F      | <br> # days > 28°F                  | <br> # days > 32°F |  |  |  |  |
| 9 years in 10 | 150                     | 122                                 | 97                 |  |  |  |  |
| 8 years in 10 | 164                     | 133                                 | 107                |  |  |  |  |
| 5 years in 10 | 189                     | 152                                 | 126                |  |  |  |  |
| 2 years in 10 | 214                     | 172                                 | 144                |  |  |  |  |
| 1 year in 10  | 227                     | 183                                 | 154                |  |  |  |  |
|               |                         |                                     |                    |  |  |  |  |

## Table 7. Acreage and Proportionate Extent of the Soils

(An \* under "Percent" indicates less than 0.1 percent)

| Map<br>symbol | Map unit name                                                                                 | Acres             | Percent    |  |
|---------------|-----------------------------------------------------------------------------------------------|-------------------|------------|--|
| F01           |                                                                                               | <br> <br>  1.157  |            |  |
| 501<br>502    | Aquic Cryofluvents, 0 to 2 percent slopes                                                     | 1,157<br>  837    | 0.1        |  |
| 502           | Badland, sea cliffs                                                                           | 637               | 0.1        |  |
| 504           | Badland, sea cliffs-Typic Cryorthents complex, very steep                                     | 1,403             | 0.1        |  |
| 505           | Beaches                                                                                       | 1,702             | 0.2        |  |
| 506           | Beluga silt loam, 0 to 4 percent slopes                                                       | 2,684             | 0.2        |  |
| 507           | Beluga silt loam, 4 to 8 percent slopes                                                       | 2,552             | 0.3        |  |
| 508           | Beluga silt loam, 8 to 15 percent slopes                                                      | 277               | 0.0        |  |
| 509           | Beluga-Mutnala complex, 0 to 8 percent slopes                                                 | 361               | *          |  |
| 510           | Beluga-Smokey Bay complex, 4 to 8 percent slopes                                              | 1,263             | 0.1        |  |
| 511           | Beluga-Smokey Bay complex, 8 to 15 percent slopes                                             | 745               | *          |  |
| 512           | Benka silt loam. 0 to 4 percent slopes                                                        | 1.528             | 0.2        |  |
| 513           | Benka silt loam, 4 to 8 percent slopes                                                        | 1.077             | 0.1        |  |
| 514           | Benka silt loam, 8 to 15 percent slopes                                                       | 577               | *          |  |
| 515           | Benka silt loam, 15 to 25 percent slopes                                                      | 947               | 0.1        |  |
| 516           | Benka silt loam, 25 to 60 percent slopes                                                      | 3.186             | 0.4        |  |
| 517           | Benka silt loams, strongly sloping and gently sloping                                         | 837               | į *        |  |
| 518           | Boxcar silt loam, 0 to 8 percent slopes                                                       | 1.295             | 0.1        |  |
| 519           | Boxcar silt loam. 8 to 25 percent slopes                                                      | l 1.189           | 0.1        |  |
| 520           | Boxcar silt loam, 25 to 60 percent slopes                                                     | 729               | j *        |  |
| 521           | Boxcar silt loam, cool, 0 to 8 percent slopes                                                 | 504               | j *        |  |
| 522           | Boxcar silt loam, cool, 25 to 60 percent slopes                                               | 2,379             | 0.3        |  |
| 523           | Chenega silt loam, 0 to 2 percent slopes                                                      | 98                | j *        |  |
| 524           | Chenega silt loam, cool, 0 to 2 percent slopes                                                | 107               | *          |  |
| 525           | Chenega very fine sandy loam, occasionally flooded, 0 to 2 percent slopes                     | 179               | *          |  |
| 526           | Chulitna silt loam, 0 to 4 percent slopes                                                     | 2,007             | 0.2        |  |
| 527           | Chulitna silt loam, 4 to 8 percent slopes                                                     | 823               | *          |  |
| 528           | Chulitna silt loam, 8 to 15 percent slopes                                                    | 500               | *          |  |
| 529           | Chulitna silt loam, 15 to 25 percent slopes                                                   | 387               | *          |  |
| 530           | Chunilna mucky silt loam, 0 to 4 percent slopes                                               | 968               | 0.1        |  |
| 531           | Chunilna mucky silt loam, 4 to 8 percent slopes                                               | 5,447             | 0.6        |  |
| 532           | Chunilna mucky silt loam, cool, 0 to 8 percent slopes                                         | 5,162             | 0.6        |  |
| 533           | Chunilna mucky silt loam, cool, 8 to 25 percent slopes                                        | 4,023             | 0.4        |  |
| 534           | Clam Gulch silt loam, 0 to 4 percent slopes                                                   | 4,105             | 0.5        |  |
| 535           | Clunie peat, 0 to 2 percent slopes                                                            | 2,577             | 0.3        |  |
| 536           | Coal Creek silt loam, 0 to 4 percent slopes                                                   | 5,019             | 0.6        |  |
| 537           | Coal Creek silt loam, 4 to 8 percent slopes                                                   | 2,864             | 0.3        |  |
| 538           | Coal Creek silt loam, 8 to 15 percent slopes                                                  | 3,221             | 0.4        |  |
| 539           | Cohoe silt loam, 0 to 4 percent slopes                                                        | 17,987            | 2.0        |  |
| 540           | Cohoe silt loam, 4 to 8 percent slopes                                                        | 14,289            | 1.6        |  |
| 541           | Cohoe silt loam, 8 to 15 percent slopes                                                       | 3,634             | 0.4        |  |
| 542           | Cohoe silt loam, 15 to 25 percent slopes                                                      | 1,746             | 0.2        |  |
| 543           | Cohoe silt loam, 25 to 45 percent slopes Cohoe silt loam, 45 to 60 percent slopes             | 1,382             | 0.2        |  |
| 544           | Cohoe silt loam, dry, 0 to 4 percent slopes                                                   | 2,339             | 0.3        |  |
| 545           | Cohoe silt loam, dry, 0 to 4 percent slopes   Cohoe silt loam, dry, 4 to 8 percent slopes     | 5,910             | 0.7        |  |
| 546<br>547    | Cohoe silt loam, dry, 4 to 8 percent slopes   Cohoe silt loam, dry, 8 to 15 percent slopes    | 10,226<br>  1,954 | 1.1        |  |
| 548           | Cohoe silt loam, dry, 8 to 15 percent slopes                                                  | 2,129             | 0.2        |  |
| 549           | Cohoe silt loam, dry, 15 to 25 percent slopes   Cohoe silt loam, dry, 25 to 45 percent slopes | 2,129             | U.Z<br>  * |  |
| 550           | Cohoe silt loam, dry, 45 to 60 percent slopes                                                 | 203               | *          |  |
| 551           | Cohoe silt loams, moderately steep and gently sloping                                         | 1,227             | 0.1        |  |
| 552           | Cohoe silt loams, dry, moderately steep and gently sloping                                    | 1,227<br>  787    | 3.1        |  |
| 553           | Cohoe-Kenai complex, 8 to 15 percent slopes                                                   | 2,191             | 0.2        |  |
| 554           | Cohoe-Kenai complex, 5 to 15 percent slopes                                                   | 575               | 0.2        |  |
| 555           | Cohoe-Nikolai complex, hilly                                                                  | 4,327             | 0.5        |  |
| 556           | Cohoe-Nikolai complex, undulating to rolling                                                  | i 3.540           | 0.4        |  |
| 557           | Cytex Creek silt loam, 4 to 15 percent slopes                                                 | 1,369             | 0.4        |  |
| 558           | Doroshin mucky peat, 0 to 4 percent slopes                                                    | 5,711             | 0.6        |  |
| 559           | Doroshin mucky peat, 4 to 8 percent slopes                                                    | 1,762             | 0.0        |  |
| 560           | Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes                | 2,184             | 0.2        |  |

Table 7. Acreage and Proportionate Extent of the Soils—Continued

| Map<br>symbol | Map unit name<br>                                                                             | Acres                  | <br>  Percent<br> |  |
|---------------|-----------------------------------------------------------------------------------------------|------------------------|-------------------|--|
| 561           | <br> Foreland peat, 0 to 4 percent slopes                                                     | 577                    |                   |  |
| 562           | Foreland-Starichkof-Soldotna complex, undulating                                              | 1,713                  | 0.2               |  |
| 563           | Gravel pits                                                                                   | ·l 1.383               | 0.2               |  |
| 564           | Illiamna silt loam, 0 to 4 percent slopes                                                     | i 2.400                | 0.3               |  |
| 565           | Illiamna silt loam, 4 to 15 percent slopes                                                    | - 5.836                | 0.7               |  |
| 566           | Illiamna silt loam. 15 to 45 percent slopes                                                   | · 1 5.534              | 0.6               |  |
| 567           | Illiamna silt loam, cool, 0 to 15 percent slopes                                              | · 1.301                | 0.1               |  |
| 568           | Ilsland silt loam, 0 to 4 percent slopes                                                      | ·l 1.618               | 0.2               |  |
| 569           | Ilsland silt loam, 4 to 8 percent slopes                                                      | · 1 760                | j *               |  |
| 570           | Ilsland silt loam, 8 to 15 percent slopes                                                     | ·l 210                 | j *               |  |
| 571           | Island silt loam, 15 to 45 percent slopes                                                     | - 541                  | *                 |  |
| 572           | Ilsland silt loam, forested, 0 to 8 percent slopes                                            | ·I 3.336               | 0.4               |  |
| 573           | Kachemak silt loam, 4 to 8 percent slopes                                                     | 6,367                  | 0.7               |  |
| 574           | Kachemak silt loam, 8 to 15 percent slopes                                                    | 9,602                  | 1.1               |  |
| 575           | Kachemak silt loam, 15 to 25 percent slopes                                                   | - 7,904                | 0.9               |  |
| 576           | Kachemak silt loam, 25 to 35 percent slopes                                                   | 4,653                  | 0.5               |  |
| 577           | Kachemak silt loam, 35 to 45 percent slopes                                                   | - 3,702                | 0.4               |  |
| 578           | Kachemak silt loam, cool, 4 to 8 percent slopes                                               | ·l 1.663               | 0.2               |  |
| 579           | Kachemak silt loam, cool, 8 to 15 percent slopes                                              | -  3,870               | 0.4               |  |
| 580           | Kachemak silt loam, cool, 15 to 25 percent slopes                                             | -  3,241               | 0.4               |  |
| 581           | Kachemak silt loam, cool, 25 to 35 percent slopes                                             | -  3,367               | 0.4               |  |
| 582           | Kachemak silt loam, cool, 35 to 45 percent slopes                                             | -  1,645               | 0.2               |  |
| 583           | Kachemak silt loam, forested, 4 to 8 percent slopes                                           | -  1,754               | 0.2               |  |
| 584           | Kachemak silt loam, forested, 8 to 15 percent slopes                                          | -  5,299               | 0.6               |  |
| 585           | Kachemak silt loam, forested, 15 to 25 percent slopes                                         | -  1,816               | 0.2               |  |
| 586           | Kachemak, cool-Snowdance complex, 0 to 4 percent slopes                                       | -  868                 | *                 |  |
| 587           | Kachemak, cool-Snowdance complex, 4 to 8 percent slopes                                       | -  3,246               | 0.4               |  |
| 588           | Kachemak, cool-Snowdance complex, 8 to 15 percent slopes                                      | -  1,664               | 0.2               |  |
| 589           | Kalifonsky silt loam, 0 to 4 percent slopes                                                   | 3,417                  | 0.4               |  |
| 590           | Kalifonsky silt loam, 4 to 8 percent slopes                                                   | 434                    | *                 |  |
| 591           | Kalifonsky-Typic Cryorthents complex, 4 to 45 percent slopes                                  | -  1,097               | 0.1               |  |
| 592           | Karluk silt loam, 0 to 4 percent slopes                                                       | -  88                  | *                 |  |
| 593           | Kashwitna silt loam, 0 to 4 percent slopes                                                    | 4,305                  | 0.5               |  |
| 594           | Kashwitna silt loam, 4 to 8 percent slopes                                                    | -  5,416               | 0.6               |  |
| 595           | Kashwitna silt loam, 8 to 15 percent slopes                                                   | -  2,554               | 0.3               |  |
| 596           | Kashwitna silt loams, moderately steep and strongly sloping                                   | 1,434                  | 0.2               |  |
| 597           | Kenai silt loam, 0 to 4 percent slopes                                                        | -  1,173               | 0.1               |  |
| 598           | Kenai silt loam, 4 to 8 percent slopes                                                        | 4,102                  | 0.5               |  |
| 599           | Kenai silt loam, 8 to 15 percent slopes                                                       | -  943                 | 0.1               |  |
| 600           | Kenai silt loam, 15 to 25 percent slopes                                                      | -  298                 | ,                 |  |
| 601           | Kenai silt loam, 25 to 45 percent slopes                                                      | -  656                 | *                 |  |
| 602           | Kenai silt loams, moderately steep and gently sloping                                         | 517                    | 0.4               |  |
| 603           | Kenai-Starichkof association, 0 to 25 percent slopesKichatna silt loam, 0 to 8 percent slopes | 3,203                  | 0.4               |  |
| 604           | Kichatna silt loam, 8 to 15 percent slopes Kichatna silt loam, 8 to 15 percent slopes         | 2,934                  | 0.3               |  |
| 605           | Kichatna silt loam, 15 to 25 percent slopes                                                   | -  516                 | 1                 |  |
| 606           | Kichatna silt loam, 15 to 25 percent slopes Kichatna silt loam, 25 to 45 percent slopes       | 1,246                  | 0.1               |  |
| 607           | Kichatna silt loam, 45 to 60 percent slopes                                                   | 1,606                  | 0.2               |  |
| 608<br>609    | Kichatna-Killey association, 0 to 65 percent slopes                                           | -  6,163<br>-  5,510   | 0.7<br>  0.6      |  |
|               | Kidazqeni silt loam, 0 to 2 percent slopes                                                    | -  3,310<br>-  841     | 0.0               |  |
| 610<br>611    | Killey and Moose River soils, 0 to 2 percent slopes                                           | -  20,637              | 2.3               |  |
| 612           | Liten very fine loam, 0 to 6 percent slopes                                                   | -  20,037              | •                 |  |
|               | Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 25 to 45 percent slopes           |                        | 0.1               |  |
| 613<br>614    | Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 25 to 45 percent slopes           |                        | 0.8               |  |
| 615           | Longmare silt loam, 0 to 4 percent slopes                                                     | -  2,366<br>-  6,368   | 0.3               |  |
| 616           | Longmare silt loam, 4 to 8 percent slopes   Longmare silt loam, 4 to 8 percent slopes         | ·  0,306<br>·  292     | 0.7               |  |
| 617           | Mutnala silt loam, 0 to 4 percent slopes                                                      | ·  292<br>·  4.141     | 0.5               |  |
|               | Muthala silt loam, 4 to 8 percent slopes                                                      | 10.465                 | •                 |  |
| 618<br>619    | Muthala silt loam, 8 to 15 percent slopes                                                     | ·  10,465<br>·  12,997 | 1.2<br>  1.5      |  |
| 620           | Muthala silt loam, 15 to 25 percent slopes                                                    | -  12,997<br>-  9,188  | 1.5               |  |
| 620<br>621    | Muthala silt loam, 15 to 25 percent slopes   Muthala silt loam, 25 to 45 percent slopes       | -  9,166<br>-  1,761   | 0.2               |  |
| 622           | Muthala silt loam, 45 to 60 percent slopes                                                    | -  1,761<br>-  534     | 0.2               |  |
| 623           | Mutnala-Starichkof-Slikok association, undulating to hilly                                    |                        | 1.0               |  |

Table 7. Acreage and Proportionate Extent of the Soils—Continued

| Map<br>symbol | Map unit name                                                                                              | Acres            | Percent      |  |
|---------------|------------------------------------------------------------------------------------------------------------|------------------|--------------|--|
| 624           | <br>  Naptowne silt loam, 0 to 4 percent slopes                                                            | <br> <br>  2,273 | 0.3          |  |
| 625           | Naptowne silt loam, 4 to 8 percent slopes                                                                  | 6,501            | 0.5          |  |
| 626           | Naptowne silt loam, 8 to 15 percent slopes                                                                 | 2,739            | 0.7          |  |
| 627           | Naptowne silt loam, 15 to 25 percent slopes                                                                | 1,450            | 0.2          |  |
| 628           | Naptowne silt loam, 25 to 60 percent slopes                                                                | 343              | *            |  |
| 629           | Naptowne silt loam, undulating                                                                             | 3,939            | 0.4          |  |
| 630           | Naptowne silt loams, moderately steep and strongly sloping                                                 | 3,374            | 0.4          |  |
| 631           | Naptowne silt loams, strongly sloping and gently sloping                                                   | 1,984            | 0.2          |  |
| 632           | Niklason very fine sandy loam, 0 to 2 percent slopes                                                       | 897              | 0.1          |  |
| 633           | Nikolaevsk silt loam, 0 to 4 percent slopes                                                                | 2,115            | 0.2          |  |
| 634           | Nikolaevsk silt loam, 4 to 8 percent slopes                                                                | 2,389            | 0.3          |  |
| 635           | Nikolaevsk silt loam, 8 to 15 percent slopesNikolai peat, 0 to 4 percent slopes                            | 1,308            | 0.1          |  |
| 636           |                                                                                                            |                  | 0.8          |  |
| 637           | Nikolai, somewhat poorly drained-Tuxedni complex, 0 to 4 percent slopes                                    | 889              | 1            |  |
| 638<br>639    | Puntilla silt loam, 8 to 25 percent slopes                                                                 | 2,176<br>  5,232 | 0.2<br>  0.6 |  |
| 640           | Qutal silt loam, 0 to 4 percent slopes                                                                     | 5,232<br>  6,486 | 0.0          |  |
| 641           | Qutal silt loam, 4 to 8 percent slopes                                                                     | 11.093           | 1.2          |  |
| 642           | Qutal silt loam, 8 to 15 percent slopes                                                                    | 1,612            | 0.2          |  |
| 643           | Redoubt silt loam, 0 to 4 percent slopes                                                                   | 1,205            | 0.1          |  |
| 644           | Redoubt silt loam, 4 to 15 percent slopes                                                                  | 9,210            | 1.0          |  |
| 645           | Redoubt silt loam, 15 to 45 percent slopes                                                                 | 8.062            | 0.9          |  |
| 646           | Redoubt silt loam, cool, 0 to 8 percent slopes                                                             | 3,342            | 0.4          |  |
| 647           | Redoubt silt loams, moderately steep and gently sloping                                                    | 3,919            | 0.4          |  |
| 648           | Redoubt, cool-Tuxedni complex, 3 to 45 percent slopes                                                      | 1,875            | 0.2          |  |
| 649           | Riverwash                                                                                                  |                  | *            |  |
| 650           | Salamatof and Doroshin peats, 0 to 2 percent slopes                                                        | 12,636           | 1.4          |  |
| 651           | Salamatof peat, 0 to 4 percent slopes                                                                      | 14,915           | 1.7          |  |
| 652           | Slikok peat, 0 to 4 percent slopes                                                                         | 4,765            | 0.5          |  |
| 653           | Slikok peat, 4 to 8 percent slopes                                                                         | 2,579            | 0.3          |  |
| 654           | Smithfha loamy very fine sand, 4 to 8 percent slopesSmithfha loamy very fine sand, 30 to 45 percent slopes | 591              | "            |  |
| 655<br>656    | Smokey Bay silt loam, 0 to 4 percent slopes                                                                | 980<br>  144     | 0.1          |  |
| 657           | Smokey Bay silt loam, 8 to 15 percent slopes                                                               | 144              | <br>  *      |  |
| 658           | Snowdance mucky silt loam, 0 to 8 percent slopes                                                           | 2,633            | 0.3          |  |
| 659           | Soldotna silt loam, 0 to 4 percent slopes                                                                  | 27,740           | 3.1          |  |
| 660           | Soldotna silt loam, 4 to 8 percent slopes                                                                  | 7,372            | 0.8          |  |
| 661           | Soldotna silt loam, 8 to 15 percent slopes                                                                 | 8,112            | 0.9          |  |
| 662           | Soldotna silt loam, 15 to 25 percent slopes                                                                | 3,320            | 0.4          |  |
| 663           | Soldotna silt loam, sandy substratum, 4 to 8 percent slopes                                                | 2,759            | 0.3          |  |
| 664           | Soldotna silt loam, sandy substratum, 8 to 15 percent slopes                                               | 4,251            | 0.5          |  |
| 665           | Soldotna silt loam, sandy substratum, 15 to 25 percent slopes                                              | 2,916            | 0.3          |  |
| 666           | Soldotna silt loam, sandy substratum, undulating                                                           | 25,926           | 2.9          |  |
| 667           | Soldotna silt loams, strongly sloping and gently sloping                                                   | 4,839            | 0.5          |  |
| 668           | Soldotna, sandy substratum-Kenai complex, 25 to 45 percent slopes                                          | 1,162            | 0.1          |  |
| 669           | Soldotna, sandy substratum-Kenai complex, undulatingSoldotna-Kichatna complex, rolling                     | 3,236            | 0.4          |  |
| 670<br>671    | Soldotna-Nichatha complex, rolling                                                                         | 1,174<br>  2,635 | 0.1          |  |
| 672           | Soldotna-Nikolai complex, 0 to 4 percent slopes                                                            | 2,655<br>  2,455 | 0.3          |  |
| 673           | Spenard peat, 0 to 4 percent slopes                                                                        | 2,892            | 0.3          |  |
| 674           | Spenard peat, 4 to 8 percent slopes                                                                        | 5,212            | 0.6          |  |
| 675           | Spenard peat, 8 to 15 percent slopes                                                                       | 2,679            | 0.3          |  |
| 676           | Starichkof and Doroshin soils, 0 to 4 percent slopes                                                       | 53,113           | 5.9          |  |
| 677           | Starichkof peat. 0 to 4 percent slopes                                                                     | 56.908           | 6.4          |  |
| 678           | Starichkof peat, 4 to 8 percent slopes                                                                     | 2,691            | 0.3          |  |
| 679           | Starichkof peat, forested, 0 to 6 percent slopes                                                           | 3,235            | 0.4          |  |
| 680           | Starichkof-Slikok-Naptowne complex, 0 to 15 percent slopes                                                 | 17,207           | j 1.9        |  |
| 681           | Starichkof-Spenard complex, undulating                                                                     | 10,382           | 1.2          |  |
| 682           | Susitna silt loam, 0 to 2 percent slopes                                                                   | 1,531            | 0.2          |  |
| 683           | Susitna silt loam, 4 to 8 percent slopes                                                                   | 203              | *            |  |
| 684           | Talkeetna silt loam, 0 to 8 percent slopes                                                                 | 2,865            | 0.3          |  |
| 685           | Talkeetna silt loam, 15 to 45 percent slopesTalkeetna-Starichkof complex, 0 to 25 percent slopes           | 4,250<br>  996   | 0.5<br>  0.1 |  |

Table 7. Acreage and Proportionate Extent of the Soils—Continued

| Map<br>symbol | Map unit name                                   | Acres            | Percent |
|---------------|-------------------------------------------------|------------------|---------|
| 687           | Tangerra silt loam, 0 to 6 percent slopes       | <br> <br>  1.568 | 0.2     |
| 688           | Tidal flats                                     | 12.193           | 1 1.4   |
| 689           | Tlikakila silt loam, 0 to 4 percent slopes      | 1,289            | 0.1     |
| 690           | Tlikakila silt loam, 4 to 8 percent slopes      |                  | 0.4     |
| 691           | Tlikakila silt loam, 8 to 15 percent slopes     | 1,872            | 0.2     |
| 692           | Tokositna silt loam, 0 to 4 percent slopes      |                  | 0.2     |
| 693           | Tokositna silt loam, 4 to 8 percent slopes      |                  | 0.3     |
| 694           | Tokositna silt loam, 8 to 15 percent slopes     | 2,240            | 0.3     |
| 695           | Truuli muck, 0 to 4 percent slopes              | 4,543            | 0.5     |
| 696           | Tutka-Kasitsna-Rock outcrop complex, very steep |                  | 0.2     |
| 697           | Tutka-Portgraham complex, hilly to steep        | 6,511            | 0.7     |
| 698           | Tuxedni silt loam, 0 to 8 percent slopes        | 2,816            | 0.3     |
| 699           | Tuxedni silt loam, 8 to 15 percent slopes       |                  | 0.2     |
| 700           | Tuxedni silt loam, warm, 0 to 8 percent slopes  | 2,530            | 0.3     |
| 701           | Typic Cryaquents, 0 to 2 percent slopes         | 8,866            | 1.0     |
| 702           | Typic Cryopsamments, 3 to 45 percent slopes     |                  | j *     |
| 703           | Typic Cryorthents, 100 to 150 percent slopes    | 13,946           | 1.6     |
| 704           | Urban land                                      | 6,854            | 0.8     |
| 705           | Water, fresh                                    | 20,938           | 2.3     |
| 706           | Whitsol silt loam, 0 to 4 percent slopes        | 12,346           | 1.4     |
| 707           | Whitsol silt loam, 4 to 8 percent slopes        |                  | 1.4     |
| 708           | Whitsol silt loam, 8 to 15 percent slopes       | 2,379            | 0.3     |
| 709           | Whitsol silt loam, 15 to 25 percent slopes      | 783              | *       |
| 710           | Whitsol silt loam, 25 to 45 percent slopes      | 350              | *       |
| 711           | Whitsol-Doroshin complex, undulating            | 3,633            | 0.4     |
|               | <br>  Total                                     | 894,793          | 100.0   |

**Table 8. Engineering Index Properties** 

(Absence of an entry indicates that the data were not estimated.)

| Map symbol                 | <br>  Depth     | USDA texture                                                                      | Classification      |                        | <br>  Liquid    | <br> Plas-      |
|----------------------------|-----------------|-----------------------------------------------------------------------------------|---------------------|------------------------|-----------------|-----------------|
| and soil name              |                 |                                                                                   | Unified             | <br>  AASHTO           | limit<br>       | ticity<br>index |
|                            | <br>  In.       |                                                                                   |                     |                        | Pct.            | -               |
| 501:                       |                 | <br>                                                                              | <br>                |                        | <br>            |                 |
| Aquic Cryofluvents         |                 | Slightly decomposed plant material                                                | PT                  | A-8                    | i               |                 |
|                            | 2-6             | Very fine sandy loam, silt loam                                                   | ML, MH              | A-5, A-4               | 40-60           | NP-5            |
|                            | 6-31<br>  31-48 | Silt loam, very fine sandy loam<br> Stratified silt loam to fine sandy loam       | MH, ML<br>  SM, ML  | A-5, A-4<br>  A-2, A-4 | 40-60<br>  0-30 | NP-5<br> NP-5   |
|                            | 31-40           | to sand                                                                           | Sivi, iviL          | A-2, A-4<br>           | 0-30<br>        |                 |
|                            | 48-60           | Sand, gravelly sand, gravelly loamy sand                                          | SP-SM, SP, SM       | A-1                    | 0-0             | NP              |
| 502:                       |                 |                                                                                   | <br>                |                        | <br>            |                 |
| Aguic Cryofluvents,        | 0-2             | Slightly decomposed plant material                                                | l<br>PT             | <br>  A-8              | i               |                 |
| shallow                    | 2-6             | Very fine sandy loam, silt loam                                                   | ML, MH              | A-5, A-4               | 40-60           | NP-5            |
|                            | 6-19            | Stratified silt loam to fine sandy loam                                           | ML, SM              | A-2, A-4               | 0-30            | NP-5            |
|                            | <br>  19-60     | to sand Gravelly loamy sand, gravelly sand, sand                                  | l<br> SP-SM, SP, SM | <br>  A-1              | l<br>l 0-0      | l<br>I NP       |
|                            |                 |                                                                                   |                     |                        |                 |                 |
| 503:<br>Radiand and cliffs |                 |                                                                                   |                     |                        |                 |                 |
| Badland, sea cliffs        | ·               | <del></del><br>                                                                   | <del></del><br>     |                        | <del></del><br> |                 |
| 504:                       | İ               | İ                                                                                 | j                   | j                      | İ               | j               |
| Badland, sea cliffs        | -               |                                                                                   |                     |                        |                 |                 |
| Typic Cryorthents          | <br>  0-1       | <br> Gravelly slightly decomposed plant material,                                 | l<br>  PT           | <br>  A-8              | <br>            |                 |
|                            | İ               | slightly decomposed plant material                                                | <u> </u>            | 1                      | İ               | į <u>.</u>      |
|                            | 1-33            | Silty clay loam, very fine sandy loam,                                            | CL, SM              | A-2, A-1, A-6          | 25-40           | NP-25           |
|                            | <br>  33-60     | gravelly very fine sandy loam Very fine sandy loam, very gravelly                 | I<br>I CL, GM       | <br> A-1, A-4, A-6     | l<br>l 25-40    | <br> NP-25      |
|                            |                 | silt loam, cobbly silty clay loam                                                 |                     |                        |                 |                 |
| 505:                       |                 | <br>                                                                              | <br>                |                        | <br>            |                 |
| Beaches                    | .               | <br>                                                                              | <br>                |                        | ¦               |                 |
|                            | į               |                                                                                   | ĺ                   | İ                      | į               | į               |
| 506:<br>Beluga             | <br>-  0-5      | <br> Moderately decomposed plant material                                         | <br>  PT            | <br>  A-8              | <br>            |                 |
| Deluga                     | 0-3<br>  5-7    | Silt loam, very fine sandy loam                                                   | SM, ML, OL          | A-6<br>  A-4           | <br>  25-35     | NP-10           |
|                            | 7-32            | Silt loam, very fine sandy loam, silty                                            | ML, SM              | A-4                    | 10-40           | NP-10           |
|                            |                 | clay loam, fine sandy loam                                                        |                     | ļ                      | į               |                 |
|                            | 32-60           | Very fine sandy loam, clay loam, silty   clay loam, silt loam, fine sandy loam    | CL, SM              | A-7, A-6, A-4          | 10-50<br>       | 2-25            |
|                            | İ               |                                                                                   | İ                   |                        | İ               |                 |
| 507:                       |                 | Madayatah, dagampagad plant matayial                                              | <br>                |                        |                 | 1               |
| Beluga                     | -  0-5<br>  5-7 | Moderately decomposed plant material<br> Very fine sandy loam, silt loam          | PT<br>  SM, ML, OL  | A-8<br>  A-4           | <br>  25-35     | <br> NP-10      |
|                            | 7-32            | Fine sandy loam, silty clay loam, very                                            | ML, SM              | A-4                    | 10-40           | NP-10           |
|                            | į               | fine sandy loam, silt loam                                                        | į                   | į                      | į               | į               |
|                            | 32-60           | Fine sandy loam, silty clay loam, clay<br>  loam, silt loam, very fine sandy loam | CL, SM              | A-7, A-6, A-4          | 10-50           | 2-25            |
|                            | ¦               |                                                                                   | <br>                |                        | ¦               | i               |
| 508:                       |                 | Landa and decrease to the control of                                              | İ                   | 1 4 6                  | į               | į               |
| Beluga                     | ·  0-5<br>  5-7 | Moderately decomposed plant material<br> Very fine sandy loam, silt loam          | PT<br> SM, ML, OL   | A-8<br>  A-4           | <br>  25-35     | <br> NP-10      |
|                            | 7-32            | Silt loam, very fine sandy loam, silty                                            | ML, SM              | A-4<br>  A-4           | 25-35           | NP-10           |
|                            | į               | clay loam, fine sandy loam                                                        |                     | İ                      | j               |                 |
|                            | 32-60           | Fine sandy loam, clay loam, very fine                                             | CL, SM              | A-7, A-6, A-4          | 10-50           | 2-25            |
|                            |                 | sandy loam, silt loam, silty clay loam                                            |                     |                        |                 |                 |

Table 8. Engineering Index Properties—Continued

| Map symbol     | <br>  Depth                       | USDA texture                                                                                                                                                                               | Classification                            |                                          | <br>  Liquid                    | <br> Plas-                  |
|----------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|---------------------------------|-----------------------------|
| and soil name  |                                   |                                                                                                                                                                                            | <br>  Unified<br>                         | <br>  AASHTO                             | limit<br> <br>                  | ticity<br>index             |
|                | In.                               |                                                                                                                                                                                            |                                           |                                          | Pct.                            |                             |
| 509:           |                                   | <br>                                                                                                                                                                                       | l<br>I                                    |                                          | <br>                            | -                           |
| Beluga         | 0-5<br>  5-7<br>  7-32            | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam, silty   clay loam, fine sandy loam                                               | PT<br>SM, ML, OL<br>ML, SM                | A-8<br>A-4<br>A-4                        | <br>  25-35<br>  10-40          | <br> NP-10<br> NP-10        |
|                | 32-60                             | Fine sandy loam, clay loam, very fine<br>  sandy loam, silt loam, silty clay loam                                                                                                          | CL, SM                                    | A-7, A-6, A-4                            | 10-50<br>                       | 2-25                        |
| Mutnala        | 0-4<br>  4-7                      | <br> Moderately decomposed plant material<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                                                                        | PT<br>  MH, SM                            | A-8<br>  A-5                             | <br> <br>  50-70<br>            | <br> NP-5                   |
|                | 7-23<br>23-60                     | Very fine sandy loam, silt loam<br> Gravelly sandy loam, very fine sandy<br>  loam, silt loam, cobbly fine sandy loam                                                                      | MH, SM<br>CL-ML, SM                       | A-5, A-2<br>A-2, A-4, A-1                | 50-70<br>  0-25<br>             | NP-5<br> NP-5<br>           |
| 510:<br>Beluga | <br>  0-5<br>  5-7<br>  7-32      | <br> Moderately decomposed plant material<br> Silt loam, very fine sandy loam<br> Silty clay loam, fine sandy loam, very                                                                   | <br>  PT<br> SM, ML, OL<br>  ML, SM       | <br>  A-8<br>  A-4<br>  A-4              | <br> <br>  25-35<br>  10-40     | <br> <br> NP-10<br> NP-10   |
|                | <br>  32-60<br>                   | fine sandy loam, silt loam<br> Very fine sandy loam, silty clay loam,<br>  silt loam, clay loam, fine sandy loam                                                                           | CL, SM                                    | A-7, A-6, A-4                            | <br>  10-50<br>                 | 2-25                        |
| Smokey Bay     | 0-2<br>  2-9<br>  9-55            | Highly decomposed plant material  Silt loam, very fine sandy loam  Gravelly fine sandy loam, stratified   silt loam to fine sandy loam                                                     | PT<br>  ML, SM<br>  ML, SM                | A-8<br>  A-4<br>  A-4, A-2               | <br> <br>  25-35<br>  25-35<br> | <br> <br> NP-10<br> NP-10   |
|                | 55-60                             | Fine sandy loam, gravelly fine sandy<br>  loam, loam, silt loam                                                                                                                            | ML, SM                                    | A-4, A-2                                 | 15-35<br>                       | NP-10                       |
| 511:           |                                   |                                                                                                                                                                                            | <br>                                      |                                          | į                               |                             |
| Beluga         | 0-5<br>  5-7<br>  7-32            | Moderately decomposed plant material<br> Silt loam, very fine sandy loam<br> Silt loam, fine sandy loam, silty clay<br>  loam, very fine sandy loam                                        | PT<br> SM, ML, OL<br>  ML, SM             | A-8<br>  A-4<br>  A-4                    | <br>  25-35<br>  10-40          | <br> NP-10<br> NP-10        |
|                | 32-60                             | Clay loam, silty clay loam, silt loam,<br>very fine sandy loam, fine sandy loam                                                                                                            | CL, SM                                    | A-7, A-6, A-4                            | <br>  10-50<br>                 | 2-25                        |
| Smokey Bay     | 0-2                               | <br> Highly decomposed plant material                                                                                                                                                      | <br>  PT                                  | <br>  A-8                                | <br>                            |                             |
|                | 2-9<br>  9-55<br>                 | Very fine sandy loam, silt loam<br> Stratified silt loam to fine sandy<br>  loam, gravelly fine sandy loam                                                                                 | ML, SM<br>  ML, SM<br>                    | A-4<br>  A-4, A-2<br>                    | 25-35<br>  25-35<br>            | NP-10<br> NP-10<br>         |
|                | 55-60                             | Gravelly fine sandy loam, silt loam,<br>loam, fine sandy loam                                                                                                                              | ML, SM                                    | A-4, A-2                                 | 15-35<br>                       | NP-10<br>                   |
| 512:           |                                   |                                                                                                                                                                                            |                                           |                                          | <br>                            |                             |
| Benka          | 0-3<br>  3-5<br>  5-30<br>  30-60 | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Sand, loamy fine sand, loamy sand,<br>  stratified coarse sand to fine sand | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-1 | <br>  40-60<br>  40-60<br>  0-5 | <br> NP-5<br> NP-5<br> NP-2 |
| 513:           |                                   |                                                                                                                                                                                            |                                           |                                          | <u> </u>                        |                             |
| Benka          | 0-3<br>  3-5<br>  5-30<br>  30-60 | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loamy sand, loamy fine sand, sand,<br>  stratified coarse sand to fine sand | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-1 | <br>  40-60<br>  40-60<br>  0-5 | <br> NP-5<br> NP-5<br> NP-2 |

Table 8. Engineering Index Properties—Continued

| Map symbol                         | <br>  Depth                                 | USDA texture                                                                                                                                                                                                                                      | Classification                            |                                          | <br>  Liquid                              | <br> Plas-                       |
|------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------------------------|----------------------------------|
| and soil name                      | <br>                                        |                                                                                                                                                                                                                                                   | Unified                                   | AASHTO                                   | limit                                     | ticity<br>index                  |
|                                    | ln.                                         |                                                                                                                                                                                                                                                   |                                           |                                          | Pct.                                      |                                  |
| 514:<br>Benka                      | <br>  0-3<br>  3-5<br>  5-30<br>  30-60     | Slightly decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Loamy sand, sand, loamy fine sand,   stratified coarse sand to fine sand                                                                 | PT<br>MH, ML<br>MH, ML<br>SM, SW-SM       | A-8<br>A-5, A-4<br>A-5, A-4<br>A-1       | <br> <br>  40-60<br>  40-60<br>  0-5      | <br> <br> NP-5<br> NP-5<br> NP-2 |
| 515:<br>Benka                      | <br>  0-3<br>  3-5<br>  5-30<br>  30-60     | <br>  Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loamy sand, loamy fine sand, sand,<br>  stratified coarse sand to fine sand                                                  | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>A-5, A-4<br>A-5, A-4<br>A-1       | <br> <br>  40-60<br>  40-60<br>  0-5      | <br> <br> NP-5<br> NP-5<br> NP-2 |
| 516:<br>Benka                      | <br>  0-3<br>  3-5<br>  5-30<br>  30-60     | Slightly decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Sand, loamy fine sand, loamy sand,   stratified coarse sand to fine sand                                                                 | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-1 | <br> <br>  40-60<br>  40-60<br>  0-5      | <br> <br> NP-5<br> NP-5<br> NP-2 |
| 517:<br>Benka, strongly<br>sloping | <br>  0-3<br>  3-5<br>  5-30<br>  30-60     | <br> Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Sand, loamy fine sand, loamy sand,<br>  stratified coarse sand to fine sand                                                   | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>  A-5, A-4<br>  A-4, A-5<br>  A-1 | <br> <br>  40-60<br>  40-60<br>  0-5      | <br> <br> NP-5<br> NP-5<br> NP-2 |
| Benka, gently sloping              | <br>  0-3<br>  3-5<br>  5-30<br>  30-60     | Slightly decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Loamy fine sand, sand, loamy sand,   stratified coarse sand to fine sand                                                                 | PT<br>  MH, ML<br>  MH, ML<br>  SM, SW-SM | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-1 | <br>  40-60<br>  40-60<br>  0-5           | <br> NP-5<br> NP-5<br> NP-2      |
| 518:<br>Boxcar                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60<br> | Slightly decomposed plant material   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Very cobbly fine sandy loam, very   gravelly sand, very cobbly fine sand,   extremely cobbly loamy fine sand, very   gravelly loamy sand | PT   MH, SM   SM, MH   GM, GP-GM,   SC-SM | A-8<br>A-5<br>A-5<br>A-2                 | <br> <br>  50-70<br>  50-70<br>  0-10<br> | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 519:<br>Boxcar                     |                                             | Slightly decomposed plant material   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Very cobbly fine sand, very cobbly fine   sandy loam, very gravelly sand, very   gravelly loamy sand, extremely cobbly   loamy fine sand | PT   MH, SM   MH, SM   GM, GP-GM,   SC-SM | <br>  A-8<br>  A-5<br>  A-5<br>  A-2     | <br>  50-70<br>  50-70<br>  0-10<br>      | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 520:<br>Boxcar                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60<br> | Slightly decomposed plant material   Slit loam, very fine sandy loam   Very fine sandy loam, silt loam   Very cobbly fine sand, loam, very cobbly   fine sand, extremely cobbly loamy fine   sand, very gravelly loamy sand, very   gravelly sand | PT   MH, SM   MH, SM   GM, GP-GM,   SC-SM | A-8<br>A-5<br>A-5<br>A-2                 | <br> <br>  50-70<br>  50-70<br>  0-10<br> | <br> <br> NP-5<br> NP-5<br> NP-5 |

Table 8. Engineering Index Properties—Continued

| Map symbol                    | <br>  Depth                           | USDA texture                                                                                                                                                                                                                                      | Classification                                            |                                    | <br>  Liquid                         | <br> Plas-                  |
|-------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------|--------------------------------------|-----------------------------|
| and soil name                 | <br> <br>                             |                                                                                                                                                                                                                                                   | <br>  Unified<br>                                         | <br>  AASHTO<br>                   | limit<br>                            | ticity<br>index             |
| 521:                          | ln.                                   |                                                                                                                                                                                                                                                   | <br>                                                      | i                                  | Pct.                                 |                             |
| Boxcar, cool                  | 0-3<br>  3-5<br>  5-20<br>  20-60<br> | Slightly decomposed plant material   Slit loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sand, very cobbly fine sandy   loam, extremely cobbly loamy fine sand,   very cobbly fine sand, very gravelly loamy   sand | PT<br>  MH, SM<br>  MH, SM<br>  GM, GP-GM,<br>  SC-SM     | A-8<br>  A-5<br>  A-5<br>  A-2     | <br>  50-70<br>  50-70<br>  0-10<br> | <br> NP-5<br> NP-5<br> NP-5 |
| 522:                          |                                       |                                                                                                                                                                                                                                                   | <br>                                                      | <br>                               |                                      |                             |
| Boxcar, cool                  | -  0-3<br>  3-5<br>  5-20<br>  20-60  | Slightly decomposed plant material  Silt loam, very fine sandy loam  Silt loam, very fine sandy loam  Very gravelly loamy sand, very cobbly fine   sand, extremely cobbly loamy fine sand,  very gravelly sand, very cobbly fine   sandy loam     | PT<br>  MH, SM<br>  MH, SM<br>  GM, GP-GM,<br>  SC-SM<br> | A-8<br>  A-5<br>  A-5<br>  A-2<br> | <br>  50-70<br>  50-70<br>  0-10<br> | <br> NP-5<br> NP-5<br> NP-5 |
| 523:                          |                                       |                                                                                                                                                                                                                                                   | <br>                                                      | <u> </u>                           |                                      |                             |
| Chenega                       | -  0-4<br>  4-7<br>  7-60             | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Very gravelly loamy sand, very gravelly<br>  sand, extremely gravelly sand                                                                                             | PT<br>OL, SM, ML<br>GP, SC-SM,<br>SP-SM                   | A-8<br>  A-4<br>  A-1<br>          | <br>  25-30<br>  0-0                 | <br> NP-5<br>  NP<br>       |
| 524:                          |                                       |                                                                                                                                                                                                                                                   |                                                           |                                    | i                                    |                             |
| Chenega, cool                 | -  0-4<br>  4-7<br>  7-60<br>         | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Extremely gravelly sand, very gravelly<br>  sand, very gravelly loamy sand                                                                                             | PT<br> ML, OL, SM<br> GP, SC-SM,<br>  SP-SM               | A-8<br>  A-4<br>  A-1              | <br>  25-30<br>  0-0<br>             | <br> NP-5<br>  NP<br>       |
| 525:                          |                                       |                                                                                                                                                                                                                                                   | <br>                                                      |                                    | i                                    |                             |
| Chenega, occasionally flooded | 0-4<br>-  4-7<br>  7-60<br>           | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Very gravelly sand, extremely gravelly<br>  sand, very gravelly loamy sand                                                                                             | PT<br> ML, OL, SM<br> GP, SC-SM,<br>  SP-SM               | A-8<br>  A-4<br>  A-1<br>          | <br>  25-30<br>  0-0<br>             | <br> NP-5<br>  NP<br>       |
| 526:                          |                                       |                                                                                                                                                                                                                                                   |                                                           |                                    |                                      |                             |
| Chulitna                      | -  0-2<br> <br>  2-33                 | Slightly decomposed plant material,<br>  moderately decomposed plant material<br> Silt loam, very fine sandy loam, mucky                                                                                                                          | PT<br> <br>  MH                                           | A-8<br> <br>  A-5                  | <br> <br>  50-70                     | <br> <br> NP-5              |
|                               | 33-60                                 | silt loam  Loamy sand, fine sand, very gravelly loamy   sand, gravelly sand, gravelly loamy fine   sand                                                                                                                                           | <br>  SM, SP<br> <br>                                     | <br>  A-1, A-2<br>                 | <br>  0-0<br>                        | <br>  NP<br>                |
| 527:                          |                                       |                                                                                                                                                                                                                                                   | <br>                                                      | <br>                               |                                      |                             |
| Chulitna                      | 0-2                                   | Slightly decomposed plant material,<br>  moderately decomposed plant material                                                                                                                                                                     | PT<br> <br>  MH                                           | A-8<br>                            |                                      | <br> <br> ND 5              |
|                               | 2-33<br>                              | Silt loam, mucky silt loam, very fine   sandy loam                                                                                                                                                                                                | MH<br>                                                    | A-5<br>                            | 50-70<br>                            | NP-5<br>                    |
|                               | 33-60                                 | Gravelly sand, very gravelly loamy sand, loamy sand, gravelly loamy fine sand, fine sand                                                                                                                                                          | SM, SP<br> <br> <br>                                      | A-1, A-2<br> <br> <br>             | 0-0<br> <br>                         | NP<br> <br> <br>            |
| 528:<br>Chulitna              | <br>-  0-2                            | <br> Slightly decomposed plant material,                                                                                                                                                                                                          | <br>  PT                                                  | <br>  A-8                          |                                      | j<br>                       |
| Griullula                     | j                                     | moderately decomposed plant material                                                                                                                                                                                                              | j                                                         | İ                                  |                                      |                             |
|                               | 2-33                                  | Silt loam, very fine sandy loam, mucky                                                                                                                                                                                                            | MH<br>                                                    | A-5                                | 50-70                                | NP-5                        |
|                               | 33-60<br> <br>                        | Fine sand, gravelly loamy fine sand, loamy   sand, very gravelly loamy sand, gravelly   sand                                                                                                                                                      | SM, SP<br> <br>                                           | A-1, A-2<br> <br>                  | 0-0<br> <br>                         | NP<br> <br>                 |

Table 8. Engineering Index Properties—Continued

| Map symbol     | <br>  Depth     | USDA texture                                                                                                              | Classification        |              | <br> Liquid      | <br> Plas-      |
|----------------|-----------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|------------------|-----------------|
| and soil name  |                 |                                                                                                                           | <br>  Unified<br>     | <br>  AASHTO | limit<br>        | ticity<br>index |
|                | ln.             |                                                                                                                           |                       |              | Pct.             | -               |
| 529:           | <br>            | <br>                                                                                                                      | <br>                  | <br>         |                  |                 |
| Chulitna       | 0-2             | Slightly decomposed plant material,<br>  moderately decomposed plant material<br>  Very fine sandy loam, silt loam, mucky | PT<br>                | A-8          |                  | <br> <br>       |
|                | 2-33            | silt loam                                                                                                                 | MH<br>                | A-5<br>      | 50-70<br>        | NP-5<br>        |
|                | 33-60           | Loamy sand, very gravelly loamy sand,<br>  gravelly sand, fine sand, gravelly<br>  loamy fine sand                        | SM, SP                | A-1, A-2     | 0-0              | NP<br> <br>     |
| 530:           |                 |                                                                                                                           |                       |              |                  |                 |
| Chunilna       | 0-4<br>  4-8    | Moderately decomposed plant material<br> Mucky silt loam, silt loam                                                       | PT<br>  OL, OH        | A-8<br>  A-5 | <br>  40-60      | <br> NP-5       |
|                | 8-18            | Silt loam, very fine sandy loam                                                                                           | ML, OL, OH            | A-5          | 40-60            | NP-5            |
|                | 18-60           | Very gravelly fine sandy loam, very gravelly   sandy loam, gravelly fine sandy loam                                       | GM, GC-GM<br>         | A-2, A-1<br> | 0-15<br>         | NP-5<br>        |
| 531:           |                 |                                                                                                                           | <u> </u>              | <u> </u>     |                  |                 |
| Chunilna       | 0-4<br>  4-8    | Moderately decomposed plant material<br> Mucky silt loam, silt loam                                                       | PT<br>  OL, OH        | A-8<br>  A-5 | <br>  40-60      | <br> NP-5       |
|                | 8-18            | Silt loam, very fine sandy loam                                                                                           | ML, OL, OH            | A-5          | 40-60            | NP-5            |
|                | 18-60           | Very gravelly fine sandy loam, very gravelly   sandy loam, gravelly fine sandy loam                                       | GC-GM, GM             | A-2, A-1<br> | 0-15             | NP-5            |
| 532:           | <br>            |                                                                                                                           | <br>                  | <br>         |                  |                 |
| Chunilna, cool |                 | Moderately decomposed plant material                                                                                      | PT                    | A-8          |                  | j               |
|                | 4-8<br>  8-18   | Silt loam, mucky silt loam<br> Silt loam, very fine sandy loam                                                            | OL, OH<br> OH, ML, OL | A-5<br>  A-5 | 40-60<br>  40-60 | NP-5<br> NP-5   |
|                | 18-60           | Very gravelly fine sandy loam, gravelly<br>  fine sandy loam, very gravelly sandy loam                                    | GC-GM, GM             | A-2, A-1     | 0-15             | NP-5            |
| 533:           |                 |                                                                                                                           | <br>                  | <br>         |                  |                 |
| Chunilna, cool | 0-4<br>  4-8    | Moderately decomposed plant material<br> Mucky silt loam, silt loam                                                       | PT<br>  OL, OH        | A-8<br>  A-5 | <br>  40-60      | <br> NP-5       |
|                | 8-18            | Silt loam, very fine sandy loam                                                                                           | ML, OL, OH            | A-5<br>  A-5 | 40-60            | NP-5            |
|                | 18-60           | Gravelly fine sandy loam, very gravelly<br>  sandy loam, very gravelly fine sandy loam                                    | GM, GC-GM             | A-1, A-2<br> | 0-15             | NP-5            |
| 534:           |                 |                                                                                                                           | <u> </u>              | !<br>!       |                  |                 |
| Clam Gulch     | 0-3<br>  3-15   | Slightly decomposed plant material<br> Silt loam                                                                          | PT<br>  OH, ML        | A-8<br>  A-5 | <br>  41-60      | <br> NP-5       |
|                |                 | Silt loam, clay loam, silty clay loam                                                                                     | ML                    | A-4, A-7     | 30-50            | 5-20            |
| 535:           |                 |                                                                                                                           |                       |              | ļ                | •               |
| Clunie         | 0-33<br>  33-60 | Peat, woody peat<br> Silt loam, silty clay loam                                                                           | PT<br>  CL            | A-8<br>  A-6 | 30-40            | 10-20           |
| 536:           | <br>            |                                                                                                                           | <br>                  | <br>         |                  |                 |
| Coal Creek     | 0-6<br>  6-15   | Slightly decomposed plant material                                                                                        | PT<br>  ML            | A-8<br>  A-4 |                  | <br> NP-5       |
|                |                 | Silt loam<br> Very fine sandy loam, silt loam                                                                             | ML, SM                | A-4<br>  A-4 | 25-40<br>  25-35 | NP-5            |
|                |                 | Very gravelly silt loam, gravelly silt loam                                                                               | GM, ML                | A-4, A-2     | 25-35            | NP-5            |
| 537:           |                 | <br>                                                                                                                      | I<br>I<br>DT          | 1 4 8        |                  |                 |
| Coal Creek     | 0-6<br>  6-15   | Slightly decomposed plant material<br> Silt loam                                                                          | PT<br>  ML            | A-8<br>  A-4 | <br>  25-40      | <br> NP-5       |
|                | 15-23           | Very fine sandy loam, silt loam                                                                                           | ML, SM                | A-4          | 25-35            | NP-5            |
|                | 23-60           | Gravelly silt loam, very gravelly silt loam                                                                               | ML, GM                | A-2, A-4     | 25-35            | NP-5            |

Table 8. Engineering Index Properties—Continued

| Map symbol         | <br>  Depth                                | USDA texture                                                                                                                                                                                          | Classification                                     |                                                   | <br> Liquid                            | <br> Plas-                       |
|--------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------|----------------------------------------|----------------------------------|
| and soil name      |                                            |                                                                                                                                                                                                       | Unified                                            | <br>  AASHTO<br>                                  | limit<br> <br>                         | ticity<br>index                  |
|                    | ln.                                        |                                                                                                                                                                                                       |                                                    | <br> <br>                                         | Pct.                                   | <br>                             |
| 538:<br>Coal Creek | -  0-6<br>  6-15<br>  15-23<br>  23-60     |                                                                                                                                                                                                       | PT<br>ML<br>ML, SM<br>ML, GM                       | <br>  A-8<br>  A-4<br>  A-4<br>  A-4, A-2         | <br> <br>  25-40<br>  25-35<br>  25-35 | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 539:               | 1                                          |                                                                                                                                                                                                       | <u> </u>                                           | <br>                                              | ¦                                      |                                  |
| Cohoe              | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, gravelly sand, gravelly silt   loam, gravelly loam, very gravelly sandy   loam | PT<br>  ML, MH<br>  MH, SM, ML<br>  GM, SM, ML<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> | <br>  40-60<br>  40-60<br>  0-30<br>   | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 540:               |                                            |                                                                                                                                                                                                       | <u> </u>                                           |                                                   |                                        |                                  |
| Cohoe              | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, gravelly loam, gravelly silt   loam, gravelly sand, very gravelly sandy   loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> | 40-60<br>  40-60<br>  0-30<br>         | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 541:               |                                            |                                                                                                                                                                                                       | <u> </u>                                           |                                                   |                                        |                                  |
| Cohoe              | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Gravelly loam, very gravelly sandy loam,   sandy loam, gravelly sand, gravelly silt   loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1           | <br>  40-60<br>  40-60<br>  0-30<br>   | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 542:               |                                            | <br>                                                                                                                                                                                                  |                                                    | <br>                                              |                                        |                                  |
| Cohoe              | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, very gravelly sandy loam,   gravelly sand, gravelly loam, gravelly   silt loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> | <br>  40-60<br>  40-60<br>  0-30<br>   | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 543:               |                                            |                                                                                                                                                                                                       | <u> </u>                                           |                                                   |                                        |                                  |
| Cohoe              |                                            | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Very gravelly sandy loam, sandy loam,   gravelly sand, gravelly loam, gravelly   silt loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> | 40-60<br>  40-60<br>  0-30<br>         | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 544:               |                                            |                                                                                                                                                                                                       | <u> </u>                                           |                                                   |                                        |                                  |
| Cohoe              | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Very gravelly sandy loam, sandy loam,   gravelly loam, gravelly sand, gravelly   silt loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> | <br>  40-60<br>  40-60<br>  0-30<br>   | <br> NP-5<br> NP-5<br> NP-5<br>  |
| 545:               |                                            |                                                                                                                                                                                                       |                                                    |                                                   |                                        |                                  |
| Cohoe, dry         | -  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, very gravelly sandy loam,   gravelly sand, gravelly silt loam, gravelly   loam | PT<br>  MH, ML<br>  MH, ML, SM<br>  ML, GM, SM<br> | A-8<br>  A-5, A-4<br>  A-4, A-5<br>  A-1, A-4     | <br>  40-60<br>  40-60<br>  0-30<br>   | <br> NP-5<br> NP-5<br> NP-5<br>  |

Table 8. Engineering Index Properties—Continued

| Map symbol                              | <br>  Depth                                   | USDA texture                                                                                                                                                                                                       | Classification                                                |                                                     | <br>  Liquid                              | <br> Plas-                       |
|-----------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|----------------------------------|
| and soil name                           | i '<br> <br>                                  |                                                                                                                                                                                                                    | Unified                                                       | <br>  AASHTO                                        | limit                                     | ticity<br>index                  |
|                                         | In.                                           |                                                                                                                                                                                                                    |                                                               | <u> </u>                                            | Pct.                                      |                                  |
| 546:<br>Cohoe, dry                      | <br>  0-2<br>  2-24<br>  24-52<br>  52-60     | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Very gravelly sandy loam, gravelly loam,   gravelly silt loam, gravelly sand, sandy   loam              | PT<br>ML, MH<br>MH, ML, SM<br>GM, SM, ML                      | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1             | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 547:<br>Cohoe, dry                      |                                               | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Gravelly sand, sandy loam, very gravelly   sandy loam, gravelly loam   loam                             | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br>      | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1             | <br> <br>  40-60<br>  40-60<br>  0-30<br> | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 548:<br>Cohoe, dry                      |                                               | <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly silt loam, sandy loam, very gravelly<br>  sandy loam, gravelly loam, gravelly sand  | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML          | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1 | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 549:<br>Cohoe, dry                      | <br>  0-2<br>  2-24<br>  24-52<br>  52-60<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, very gravelly sandy loam,   gravelly loam, gravelly silt loam,   gravelly sand              | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br>      | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1             | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 550:<br>Cohoe, dry                      | 24-52                                         | <br>  Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly sand, gravelly silt loam, gravelly<br>  loam, sandy loam, very gravelly sandy loam | <br> <br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br>         | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1 | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 551:<br>Cohoe, moderately<br>steep      | 24-52                                         |                                                                                                                                                                                                                    | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br>      | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1             | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| Cohoe, gently sloping                   | 2-24<br>  24-52                               | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, very gravelly sandy loam,   gravelly loam, gravelly silt loam,   gravelly sand              | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br> <br> | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1 | <br> <br>  40-60<br>  40-60<br>  0-30<br> | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 552:<br>Cohoe, dry,<br>moderately steep | 24-52                                         | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Gravelly sand, sandy loam, very   gravelly sandy loam, gravelly loam,   gravelly silt loam              | <br>  PT<br>  MH, ML<br>  MH, ML, SM<br>  GM, SM, ML<br>      | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1             | <br> <br>  40-60<br>  40-60<br>  0-30     | <br> <br> NP-5<br> NP-5<br> NP-5 |

Table 8. Engineering Index Properties—Continued

| Map symbol                            | <br>  Depth              | USDA texture                                                                                                                                                                                                            | Classification                           |                                                        | <br>  Liquid                                      | <br> Plas-                       |
|---------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------|---------------------------------------------------|----------------------------------|
| and soil name                         |                          |                                                                                                                                                                                                                         | Unified                                  | AASHTO                                                 | limit                                             | ticity<br>index                  |
| 552:<br>Cohoe, dry, gently<br>sloping | 2-24<br>  24-52          | <br>  Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly silt loam, gravelly sand, sandy<br>  loam, very gravelly sandy loam, gravelly<br>  loam | PT<br>MH, ML<br>MH, ML, SM<br>GM, SM, ML | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1                | Pct.     40-60   40-60   0-30                     | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 553:<br>Cohoe, dry                    | 2-24<br>  24-52          | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Sandy loam, very gravelly sandy loam,   gravelly loam, gravelly silt loam,   gravelly sand                   | PT<br>MH, ML<br>MH, ML, SM<br>GM, SM, ML | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1                | <br> <br>  40-60<br>  40-60<br>  0-30             | <br> <br> NP-5<br> NP-5<br> NP-5 |
| Kenai                                 | 2-6<br>  6-19<br>  19-24 | Moderately decomposed plant material   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Silt loam, loam, very fine sandy loam   Gravelly loam, silt loam, silty clay loam                            | PT<br>MH, ML<br>MH, ML<br>ML, SM<br>CL   | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br> <br>  40-60<br>  40-60<br>  25-35<br>  30-40 | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 554:<br>Cohoe, dry                    | 2-24<br>24-52            | <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly silt loam, gravelly loam, very<br>  gravelly sandy loam, sandy loam,<br>  gravelly sand  | PT<br>MH, ML<br>MH, ML, SM<br>GM, SM, ML | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1    | <br> <br>  40-60<br>  40-60<br>  0-30<br>         | <br> <br> NP-5<br> NP-5<br> NP-5 |
| Kenai                                 | 2-6<br>  6-19<br>  19-24 | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Loam, silt loam, very fine sandy loam   Gravelly loam, silt loam, silty clay loam                            | PT<br>MH, ML<br>MH, ML<br>ML, SM<br>CL   | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br> <br>  40-60<br>  40-60<br>  25-35<br>  30-40 | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 555:<br>Cohoe, dry                    | 2-24<br>24-52            | <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly silt loam, gravelly sand, gravelly<br>  loam, very gravelly sandy loam, sandy loam       | PT<br>MH, ML<br>MH, ML, SM<br>GM, SM, ML | <br>  A-8<br>  A-5, A-4<br>  A-4, A-5<br>  A-4, A-1    | <br> <br>  40-60<br>  40-60<br>  0-30             | <br> <br> NP-5<br> NP-5<br> NP-5 |
| Nikolai                               | 2-32                     | Peat   Muck   Silt loam, very fine sandy loam, fine   sandy loam, gravelly very fine sandy   loam, gravelly fine sandy loam,                                                                                            | PT<br>PT<br>MH, ML, SM                   | <br>  A-8<br>  A-8<br>  A-2, A-5<br>                   | <br> <br> <br>  0-60<br>                          | <br> <br> <br> NP-5<br>          |
|                                       | <br>  41-60<br> <br>     | gravelly silt loam Gravelly sand, loamy sand, sand, very gravelly loamy sand, gravelly loamy sand, very gravelly sand                                                                                                   | SM                                       | <br>  A-2, A-1<br> <br>                                | <br>  0-0<br> <br>                                | <br>  NP<br> <br>                |

Table 8. Engineering Index Properties—Continued

| Map symbol        | <br>  Depth         | USDA texture                                                                                                                                                                                | Classification                                 |                                         | <br>  Liquid                     | <br> Plas-                  |
|-------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------|
| and soil name     | <br> <br>           |                                                                                                                                                                                             | <br>  Unified<br>                              | <br>  AASHTO<br>                        | limit<br> <br>                   | ticity<br>index             |
|                   | In.                 |                                                                                                                                                                                             |                                                |                                         | Pct.                             |                             |
| 556:              | l<br>I              | <br>                                                                                                                                                                                        | <br>                                           | <u> </u>                                | <br>                             |                             |
| Cohoe, dry        |                     | Moderately decomposed plant material Very fine sandy loam, silt loam Very fine sandy loam, silt loam Gravelly sand, gravelly silt loam, gravelly loam, very gravelly sandy loam, sandy loam | PT<br>  MH, ML<br>  ML, SM, MH<br>  GM, SM, ML | A-8<br>A-4, A-5<br>A-4, A-5<br>A-4, A-1 | <br>  40-60<br>  40-60<br>  0-30 | <br> NP-5<br> NP-5<br> NP-5 |
| Nikolai           | <br>  0-2           | <br> Peat                                                                                                                                                                                   | <br>  PT                                       | <br>  A-8                               | <br>                             |                             |
|                   | 2-32                | Muck                                                                                                                                                                                        | PT                                             | A-8                                     |                                  | j                           |
|                   | 32-41<br> <br>      | Very fine sandy loam, gravelly fine sandy<br>  loam, gravelly silt loam, silt loam, gravelly<br>  very fine sandy loam, fine sandy loam                                                     | MH, ML, SM<br> <br>                            | A-2, A-5<br> <br>                       | 0-60<br> <br>                    | NP-5<br> <br>               |
|                   | 41-60<br> <br> <br> | Sand, gravelly sand, loamy sand,<br>  gravelly loamy sand, very gravelly<br>  loamy sand, very gravelly sand                                                                                | SM<br> <br>                                    | A-2, A-1<br> <br> <br>                  | 0-0<br> <br>                     | NP<br> <br> <br>            |
| 557:              |                     |                                                                                                                                                                                             | j<br>L DT                                      | 40                                      |                                  | į                           |
| Cytex Creek       | 0-2<br>  2-3        | Slightly decomposed plant material<br> Very fine sandy loam, silt loam                                                                                                                      | PT<br>  MH                                     | A-8<br>  A-5, A-4                       | <br>  40-60                      | <br> NP-5                   |
|                   | 3-7<br>             | Silt loam, very fine sandy loam, fine<br>  sandy loam                                                                                                                                       | ML, SM, MH<br>                                 | A-5, A-4                                | 40-60<br>  40-60<br>             | NP-5                        |
|                   | 7-31                | Silt loam, gravelly fine sandy loam,<br>  fine sandy loam, sandy loam                                                                                                                       | ML, SM                                         | A-4, A-2                                | 15-30                            | NP-5                        |
|                   | <br>  31-60<br>     | Extremely gravelly loamy fine sand,<br>very cobbly loamy sand                                                                                                                               | <br>  GP, SC-SM,<br>  SP-SM                    | <br>  A-1<br>                           | <br>  0-14<br>                   | NP-5                        |
| 558:              | <br>                |                                                                                                                                                                                             | ]<br>]                                         | <u> </u>                                | <br>                             |                             |
| Doroshin          |                     | Mucky peat<br> Silt loam, very fine sandy loam                                                                                                                                              | PT<br>  MH<br>                                 | A-8<br>  A-5                            | <br>  50-70                      | <br> NP-5                   |
| 559:              | <br>                |                                                                                                                                                                                             | <br>                                           | !<br>                                   | <br>                             |                             |
| Doroshin          | 0-36<br>  36-60     | Mucky peat<br> Silt loam, very fine sandy loam<br>                                                                                                                                          | PT<br>  MH<br>                                 | A-8<br>  A-5<br>                        | <br>  50-70<br>                  | <br> NP-5<br>               |
| 560:              |                     |                                                                                                                                                                                             |                                                |                                         |                                  | į                           |
| Dystrocryepts     | 0-2<br>  2-7        | Slightly decomposed plant material<br> Silt loam, gravelly sandy loam, very gravelly                                                                                                        | PT<br>  CL-ML, GM,                             | A-8<br>  A-1, A-4                       | <br>  0-20                       | <br> NP-5                   |
|                   | - 7                 | fine sandy loam, very fine sandy loam                                                                                                                                                       | GW-GM                                          | 71,77                                   | 0 20                             |                             |
|                   | 7-23                | Extremely gravelly loamy sand, gravelly                                                                                                                                                     | GW-GM, GM, GW                                  | A-1                                     | 0-5                              | NP-2                        |
|                   | <br>  23-60<br>     | fine sandy loam, gravelly loamy sand<br> Very gravelly fine sandy loam, very<br>  gravelly loamy sand, very cobbly loamy                                                                    | <br>  GM, GP, GW<br>                           | <br>  A-1<br>                           | <br>  0-5<br>                    | <br> NP-2<br>               |
|                   | <br> <br>           | sand, gravelly fine sandy loam, extremely gravelly sand, extremely stony sand                                                                                                               | <br>                                           | <br> <br>                               | <br> <br>                        |                             |
| Typic Cryorthents | 0-1                 | Slightly decomposed plant material, gravelly                                                                                                                                                | <br>  PT                                       | <br>  A-8                               | <br>                             | ļ                           |
|                   | <br>  1-33          | slightly decomposed plant material Gravelly very fine sandy loam, silty clay loam, very fine sandy loam                                                                                     | <br>  CL, SM                                   | <br> A-2, A-1, A-6                      | <br>  25-40<br>                  | <br> NP-25                  |
|                   | 33-60               | Very fine sandy loam, very gravelly   silt loam, cobbly silty clay loam                                                                                                                     | CL, GM                                         | <br> A-1, A-4, A-6<br>                  | 25-40                            | <br> NP-25                  |
| Iliamna, cool     | <br>  0-2           | <br> Moderately decomposed plant material                                                                                                                                                   | <br>  PT                                       | <br>  A-8                               | <br>                             |                             |
|                   | 2-29<br>            | Silt loam, mucky silt loam, very fine sandy loam, fine sandy loam                                                                                                                           |                                                | A-5, A-4<br>                            | <br>  40-60<br>                  | NP-5                        |
|                   | 29-60               | Loamy fine sand, gravelly sand, very gravelly sand, sand                                                                                                                                    | SM, GP                                         | A-2, A-1<br>                            | 0-0<br>                          | NP                          |

Table 8. Engineering Index Properties—Continued

| Map symbol         | <br>  Depth     | USDA texture                                                                                  | Classification           |                    | <br>  Liquid  | <br> Plas-      |
|--------------------|-----------------|-----------------------------------------------------------------------------------------------|--------------------------|--------------------|---------------|-----------------|
| and soil name      | j .             |                                                                                               | <br>  Unified            | <br>  AASHTO       | limit         | ticity<br>index |
|                    | ln.             |                                                                                               |                          |                    | Pct.          | -               |
| 561:               |                 |                                                                                               | İ                        | <br>               |               |                 |
| Foreland           | 0-13            | <br> Peat, mucky peat                                                                         | l<br>I PT                | <br>  A-8          |               |                 |
|                    | 13-19           | Fine sandy loam, loamy sand, sand                                                             | SM, SP-SM,               | A-3, A-2           | 0-15          | NP-5            |
|                    | <br>  19-60<br> | <br> Gravelly sand, gravelly loamy sand,<br>  sand, loamy sand, gravelly sandy loam           | SC-SM<br>  SM, SP-SM<br> | <br>  A-3, A-2<br> | 0-10          | <br> NP-2<br>   |
| 562:               |                 |                                                                                               |                          |                    |               |                 |
| Foreland           | 0-13            | Peat, mucky peat                                                                              | l<br>PT                  | <br>  A-8          |               |                 |
|                    | 13-19           | Fine sandy loam, sand, loamy sand                                                             | SM, SP-SM,               | A-3, A-2           | 0-15          | NP-5            |
|                    | <br>  19-60<br> | <br> Gravelly sand, gravelly loamy sand,<br>  sand, loamy sand, gravelly sandy loam           | SC-SM<br>SM, SP-SM       | <br>  A-3, A-2<br> | 0-10          | <br> NP-2<br>   |
| Caldataa           |                 |                                                                                               | j<br>DT                  | j<br>              | į             | į               |
| Soldotna           | 0-4<br>  4-7    | Moderately decomposed plant material<br> Silt loam, very fine sandy loam                      | PT<br> MH, ML, SM        | A-8<br>  A-5, A-4  | <br>  40-60   | <br>INP-5       |
|                    | 7-22            | Silt loam, very fine sandy loam                                                               | MH, ML, SM               | A-5, A-4           | 140-60        | NP-5            |
|                    |                 | Very fine sandy loam, gravelly silt                                                           | MĹ, GM                   | A-4, A-1           | 30-40         | NP-5            |
|                    |                 | loam, silt loam                                                                               |                          |                    |               |                 |
|                    | 29-60           | Very gravelly sand, stratified very gravelly<br>  sand to silt loam, very gravelly loamy sand | GP, SM, SP-SM<br> <br>   | A-1, A-2<br> <br>  | 0-0<br>       | NP<br> <br>     |
| Starichkof         | 0-7             | <br> Peat                                                                                     | PT                       | <br>  A-8          |               | i               |
|                    | 7-60            | Stratified mucky peat to silt loam to ashy sand                                               | PT<br>                   | A-8                |               | <br>            |
| 563:               |                 |                                                                                               | ]<br>                    | <br>               |               |                 |
| Pits, gravel       |                 | İ                                                                                             | j                        | i                  | i             | j               |
| FC4.               | -               |                                                                                               |                          |                    | ļ             |                 |
| 564:<br>Iliamna    | <br>  0-2       | <br> Moderately decomposed plant material                                                     | l<br>I PT                | <br>  A-8          | <br>          |                 |
| marma              | 2-29            | Fine sandy loam, very fine sandy loam,                                                        | ML, MH                   | A-5, A-4           | <br>  40-60   | NP-5            |
|                    | j               | mucky silt loam, silt loam                                                                    | İ                        | j                  | İ             | İ               |
|                    | 29-60           | Gravelly sand, sand, loamy fine sand,<br>  very gravelly sand                                 | SM, GP<br>               | A-2, A-1<br>       | 0-0           | NP<br>          |
| 565:               | -               |                                                                                               | ]<br>                    | <br>               | <u> </u>      |                 |
| Iliamna            | 0-2             | Moderately decomposed plant material                                                          | j PT                     | A-8                | j             | j               |
|                    | 2-29            | Silt loam, fine sandy loam, very fine                                                         | ML, MH                   | A-5, A-4           | 40-60         | NP-5            |
|                    | 129-60          | sandy loam, mucky silt loam Very gravelly sand, sand, gravelly                                | <br>  SM, GP             | <br>  A-2, A-1     | <br>  0-0     | l<br>I NP       |
|                    | 23 00           | sand, loamy fine sand                                                                         | OW, GI                   | 72,71              |               | '''             |
| 566:               |                 |                                                                                               | ]<br>                    | <br>               |               |                 |
| Iliamna            | 0-2             | Moderately decomposed plant material                                                          | j PT                     | ј А-8              | j             | j               |
|                    | 2-29            | Fine sandy loam, silt loam, mucky silt                                                        | ML, MH                   | A-5, A-4           | 40-60         | NP-5            |
|                    | <br>  29-60<br> | loam, very fine sandy loam<br>Very gravelly sand, loamy fine sand,<br>sand, gravelly sand     | SM, GP                   | <br>  A-2, A-1<br> | <br>  0-0<br> | <br>  NP<br>    |
| E67:               |                 |                                                                                               | !                        |                    |               |                 |
| 567: Iliamna, cool | <br>  0-2       | <br> Moderately decomposed plant material                                                     | <br>  PT                 | <br>  A-8          | <br>          | <br>            |
| maima, 000i        | 2-29            | Very fine sandy loam, mucky silt loam,<br>  silt loam, fine sandy loam                        | FI<br>  ML, MH<br>       | A-5, A-4<br>       | 40-60         | NP-5            |
|                    | 29-60           | Loamy fine sand, very gravelly sand, gravelly sand, sand                                      | SM, GP                   | A-2, A-1           | 0-0           | NP              |

Table 8. Engineering Index Properties—Continued

| Map symbol       | <br>  Depth                | USDA texture                                                                                                                                                                                                                                            | Classification                                      |                                                             |                                                  | <br> Plas-                                |
|------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------|-------------------------------------------|
| and soil name    | į                          |                                                                                                                                                                                                                                                         | Unified                                             | AASHTO                                                      | Liquid<br>  limit<br>                            | ticity<br>index                           |
|                  | In.                        |                                                                                                                                                                                                                                                         |                                                     |                                                             | Pct.                                             |                                           |
| 568:<br>Island   | 24-33                      | Slightly decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Fine sandy loam, very fine sandy loam,   gravelly sandy loam, gravelly loamy   sand, silt loam               | <br>  PT<br>  MH<br>  MH<br>  MH, ML<br>  CL-ML, SM | <br>  A-8<br>  A-5<br>  A-5<br>  A-5, A-4<br> A-4, A-2, A-1 | <br> <br>  50-70<br>  50-70<br>  40-60<br>  0-15 | <br> <br> NP-5<br> NP-5<br> NP-5<br> NP-5 |
| 569:             |                            |                                                                                                                                                                                                                                                         | <br>  DT                                            |                                                             |                                                  |                                           |
| Island           |                            | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Very fine sandy loam, silt loam<br> Gravelly sandy loam, gravelly loamy<br>  sand, silt loam, fine sandy loam, very<br>  fine sandy loam | PT<br>  MH<br>  MH<br>  MH, ML<br>  CL-ML, SM<br>   | A-8<br>  A-5<br>  A-5<br>  A-5, A-4<br> A-4, A-2, A-1       | <br>  50-70<br>  50-70<br>  40-60<br>  0-15<br>  | <br> NP-5<br> NP-5<br> NP-5<br> NP-5      |
| 570:             |                            |                                                                                                                                                                                                                                                         | <br>                                                |                                                             | į                                                |                                           |
| Island           |                            | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, fine sandy loam,<br>  silt loam, gravelly sandy loam,<br>  gravelly loamy sand | PT<br>  MH<br>  MH<br>  MH, ML<br>  CL-ML, SM<br>   | A-8<br>  A-5<br>  A-5<br>  A-5, A-4<br> A-4, A-2, A-1       | <br>  50-70<br>  50-70<br>  40-60<br>  0-15<br>  | <br> NP-5<br> NP-5<br> NP-5<br> NP-5      |
| 571:<br>Island   | 1-13<br>  13-24            | Slightly decomposed plant material   Slit loam, very fine sandy loam   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Very fine sandy loam, fine sandy loam,   silt loam, gravelly loamy sand,   gravelly sandy loam               | PT MH MH MH MH, ML CL-ML, SM                        | <br>  A-8<br>  A-5<br>  A-5<br>  A-5, A-4<br> A-4, A-2, A-1 | <br> <br>  50-70<br>  50-70<br>  40-60<br>  0-15 | <br> NP-5<br> NP-5<br> NP-5<br> NP-5      |
| 572:             |                            |                                                                                                                                                                                                                                                         |                                                     |                                                             | <br>                                             |                                           |
| Island, forested | 1-13<br>  13-24<br>  24-33 | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Very fine sandy loam, fine sandy loam,<br>  silt loam, gravelly loamy sand,<br>  gravelly sandy loam | PT<br>  MH<br>  MH<br>  MH, ML<br>  CL-ML, SM<br>   | A-8<br>  A-5<br>  A-5<br>  A-5, A-4<br> A-4, A-2, A-1       |                                                  | <br> NP-5<br> NP-5<br> NP-5<br> NP-5      |
| 573:             |                            |                                                                                                                                                                                                                                                         |                                                     |                                                             | <br>                                             |                                           |
| Kachemak         | 0-3<br>  3-8               | Slightly decomposed plant material<br> Very fine sandy loam, silt loam, mucky                                                                                                                                                                           | PT<br>ML, SM, MH                                    | A-8<br>A-4, A-5                                             | 40-60                                            | <br> NP-5                                 |
|                  | 8-30                       | silt loam<br> Very fine sandy loam, silt loam, mucky                                                                                                                                                                                                    | SM, MH, ML                                          | <br>  A-5, A-4                                              | <br>  40-60                                      | NP-5                                      |
|                  | <br>  30-60<br> <br>       | silt loam<br> Gravelly very fine sandy loam, gravelly<br>  fine sandy loam, silt loam, gravelly<br>  silt loam, gravelly sandy loam, very<br>  fine sandy loam                                                                                          | ML, SM                                              | <br>  A-4, A-1<br>                                          | <br>  5-30<br> <br> <br>                         | <br> NP-5<br> <br>                        |

Table 8. Engineering Index Properties—Continued

| Map symbol     | <br>  Depth      | USDA texture                                                                                                                                                    | Classification         |                       | <br> Liquid         | <br> Plas-               |
|----------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------|---------------------|--------------------------|
| and soil name  |                  |                                                                                                                                                                 | Unified                | AASHTO                | limit<br>           | ticity<br>inde           |
|                | In.              |                                                                                                                                                                 |                        | - <u> </u>            | Pct.                | -                        |
| 574:           |                  |                                                                                                                                                                 |                        |                       | <br>                |                          |
| Kachemak       | 0-3<br>  3-8<br> | Slightly decomposed plant material<br> Silt loam, very fine sandy loam, mucky<br>  silt loam                                                                    | PT<br> ML, SM, MH<br>  | A-8<br>  A-4, A-5<br> | <br>  40-60<br>     | <br> NP-5<br>            |
|                | 8-30             | Silt loam, mucky silt loam, very fine<br>  sandy loam                                                                                                           | SM, MH, ML             | A-5, A-4              | 40-60               | NP-5                     |
|                | 30-60            | Gravelly very fine sandy loam, gravelly   fine sandy loam, gravelly silt loam,   gravelly sandy loam, very fine sandy   loam, silt loam                         | ML, SM<br> <br> -      | A-4, A-1              | 5-30<br> <br> <br>  | NP-5<br> <br> <br>       |
| 575:           |                  | <br>                                                                                                                                                            | <br>                   |                       |                     |                          |
| Kachemak       | 0-3<br>  3-8     | Slightly decomposed plant material Very fine sandy loam, mucky silt loam, I silt loam                                                                           | PT<br>  ML, SM, MH     | A-8<br>A-4, A-5       | <br>  40-60         | <br> NP-5                |
|                | 8-30             | Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                                                           | SM, MH, ML             | A-5, A-4              | 40-60               | NP-5                     |
|                | 30-60            | Sandy loam<br> Gravelly silt loam, gravelly fine sandy<br>  loam, gravelly very fine sandy loam,<br>  gravelly sandy loam, very fine sandy<br>  loam, silt loam | <br>  ML, SM<br> <br>  | A-4, A-1<br> <br>     | <br>  5-30<br> <br> | <br> NP-5<br> <br>       |
| 576:           |                  |                                                                                                                                                                 |                        |                       |                     |                          |
| Kachemak       | 0-3<br>  3-8<br> | Slightly decomposed plant material<br> Silt loam, very fine sandy loam, mucky<br>  silt loam                                                                    | PT<br>  ML, SM, MH<br> | A-8<br>  A-4, A-5<br> | <br>  40-60<br>     | <br> NP-5<br>            |
|                | 8-30             | Very fine sandy loam, mucky silt loam,<br>  silt loam                                                                                                           | SM, MH, ML             | A-5, A-4              | 40-60               | NP-5                     |
|                | 30-60            | Silt loam, very fine sandy loam,<br>  gravelly sandy loam, gravelly silt<br>  loam, gravelly very fine sandy loam,<br>  gravelly fine sandy loam                | ML, SM                 | A-4, A-1              | 5-30<br> <br> <br>  | NP-5<br> <br> <br>       |
| 577:           |                  |                                                                                                                                                                 |                        | <br>                  |                     |                          |
| Kachemak       | 0-3<br>  3-8     | Slightly decomposed plant material  Mucky silt loam, very fine sandy loam,   silt loam                                                                          | PT<br>  ML, SM, MH<br> | A-8<br>A-4, A-5       | <br>  40-60         | <br> NP-5                |
|                | 8-30             | Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                                                           | SM, MH, ML             | A-5, A-4              | 40-60               | NP-5                     |
|                | 30-60            | Silt loam, very fine sandy loam, gravelly   sandy loam, gravelly silt loam, gravelly   very fine sandy loam, gravelly fine sandy   loam                         | ML, SM<br> <br> -      | A-4, A-1              | 5-30<br> <br> <br>  | NP-5                     |
| 578:           |                  |                                                                                                                                                                 | <br>                   |                       |                     |                          |
| Kachemak, cool | 0-3<br>  3-8<br> | Slightly decomposed plant material<br> Mucky silt loam, very fine sandy loam,<br>  silt loam                                                                    | PT<br>  ML, SM, MH<br> | A-8<br>  A-4, A-5<br> | <br>  40-60<br>     | <del></del><br> NP-5<br> |
|                | 8-30             | Mucky silt loam, very fine sandy loam,                                                                                                                          | SM, MH, ML             | A-5, A-4              | 40-60               | NP-5                     |
|                | 30-60            | Gravelly very fine sandy loam, gravelly<br>  fine sandy loam, gravelly silt loam, silt loam,<br>  very fine sandy loam, gravelly sandy loam                     | ML, SM<br> <br>        | A-4, A-1              | 5-30                | NP-5                     |

Table 8. Engineering Index Properties—Continued

| Map symbol         | <br>  Depth | <br>  USDA texture                                                                                                                                            | Classification          |                       | <br>  Liquid               | <br> Plas-              |
|--------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------|----------------------------|-------------------------|
| and soil name      |             |                                                                                                                                                               | Unified                 | AASHTO                | limit<br>                  | ticity<br>inde          |
|                    | In.         |                                                                                                                                                               |                         |                       | Pct.                       |                         |
| 579:               |             |                                                                                                                                                               |                         |                       |                            |                         |
| Kachemak, cool     |             | Slightly decomposed plant material<br> Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                  | PT<br>  ML, SM, MH<br>  | A-8<br>  A-4, A-5<br> | <br>  40-60<br>            | <br> NP-5<br>           |
|                    | 8-30        | Silt loam, very fine sandy loam, mucky                                                                                                                        | SM, MH, ML              | A-5, A-4              | 40-60                      | NP-5                    |
|                    | 30-60       | Gravelly very fine sandy loam, gravelly fine sandy loam, silt loam, gravelly sandy loam, gravelly silt loam, very fine sandy loam                             | ML, SM<br> <br>         | A-4, A-1              | 5-30<br> <br>              | NP-5<br> <br>           |
| 580:               |             |                                                                                                                                                               | <br>                    |                       |                            |                         |
| Kachemak, cool     |             | Slightly decomposed plant material<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                                                  | PT<br>  ML, SM, MH<br>  | A-8<br>  A-4, A-5<br> | <br>  40-60<br>            | <br> NP-5<br>           |
|                    | 8-30        | Mucky silt loam, very fine sandy loam,<br>  silt loam                                                                                                         | SM, MH, ML              | A-5, A-4              | 40-60                      | NP-5                    |
|                    | 30-60       | Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam                             | <br>  ML, SM<br> <br>   | A-4, A-1              | 5-30<br> <br> <br>         | <br> NP-5<br> <br> <br> |
| 581:               |             | <br>                                                                                                                                                          | <br>                    |                       |                            |                         |
| Kachemak, cool     |             | Slightly decomposed plant material<br> Very fine sandy loam, mucky silt loam,                                                                                 | PT<br>  ML, SM, MH      | A-8<br>  A-4, A-5     | <br>  40-60                | <br> NP-5               |
|                    | 8-30        | silt loam<br> Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                                           | <br>  SM, MH, ML        | A-5, A-4              | <br>  40-60                | <br> NP-5               |
|                    | 30-60       | Very fine sandy loam, gravelly fine sandy   loam, gravelly very fine sandy loam,   gravelly silt loam, gravelly sandy loam,   silt loam                       | ML, SM                  | A-4, A-1              | 5-30<br> <br> <br>         | NP-5<br> <br>           |
| 582:               |             | <br>                                                                                                                                                          | <br>                    |                       |                            |                         |
| Kachemak, cool     |             | Slightly decomposed plant material<br> Mucky silt loam, very fine sandy loam,<br>  silt loam                                                                  | PT<br>  ML, SM, MH<br>  | A-8<br>  A-4, A-5<br> | <del></del><br>  40-60<br> | <br> NP-5<br>           |
|                    | 8-30        | Mucky silt loam, very fine sandy loam,                                                                                                                        | SM, MH, ML              | A-5, A-4              | 40-60                      | NP-5                    |
|                    | 30-60       | Gravelly fine sandy loam, gravelly very   fine sandy loam, gravelly silt loam,   gravelly sandy loam, very fine sandy   loam, silt loam                       | ML, SM<br> <br> -<br> - | A-4, A-1              | 5-30<br> <br> <br>         | NP-5<br> <br> <br>      |
| 583:               |             |                                                                                                                                                               | <br> <br>               |                       |                            |                         |
| Kachemak, forested |             | Slightly decomposed plant material<br> Very fine sandy loam, mucky silt loam,<br>  silt loam                                                                  | PT<br>  ML, SM, MH<br>  | A-8<br>  A-4, A-5     | <br>  40-60                | <br> NP-5               |
|                    | 8-30        | Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                                                         | I<br>  SM, MH, ML<br>   | A-5, A-4              | 40-60                      | NP-5                    |
|                    | 30-60       | Sainty loain<br>  Gravelly fine sandy loam, gravelly very<br>  fine sandy loam, gravelly silt loam, gravelly<br>  sandy loam, very fine sandy loam, silt loam | <br>  ML, SM<br>        | A-4, A-1              | 5-30                       | <br> NP-5<br>           |

Table 8. Engineering Index Properties—Continued

| Map symbol<br>and soil name | <br>  Depth               | <br>Depth   USDA texture                                                                                                                                   | Classification                         |                                      | <br>  Liquid              | <br> Plas-              |
|-----------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|---------------------------|-------------------------|
|                             | <br> <br>                 |                                                                                                                                                            | Unified                                | AASHTO                               | limit                     | ticity<br>index         |
|                             | In.                       |                                                                                                                                                            |                                        |                                      | Pct.                      |                         |
| 584:<br>Kachemak, forested  | <br> <br>  0-3<br>  3-8   | <br> <br> Slightly decomposed plant material<br> Silt loam, very fine sandy loam, mucky                                                                    | <br> <br>  PT<br>  ML, SM, MH          | <br> <br>  A-8<br>  A-4, A-5         | <br> <br> <br>  40-60     | <br> <br> NP-5          |
|                             | <br>  8-30                | silt loam   Mucky silt loam, silt loam, very fine                                                                                                          | <br>  SM, MH, ML                       | <br>  A-5, A-4                       | <br>  40-60               | <br> NP-5               |
|                             | <br>  30-60<br> <br> <br> | sandy loam [Gravelly very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam, silt loam              | <br>  ML, SM<br> <br> <br>             | <br>  A-4, A-1<br> <br>              | <br>  5-30<br> <br> <br>  | <br> NP-5<br> <br> <br> |
| 585:<br>Kachemak forested   | <br> <br>  0-3            | <br> <br> Slightly decomposed plant material                                                                                                               | <br> <br>  PT                          | <br>  A-8                            | <br> <br>                 |                         |
| Kachemak, forested          | 3-8                       | Silt loam, very fine sandy loam, mucky                                                                                                                     | ML, SM, MH                             | A-4, A-5                             | 40-60                     | NP-5                    |
|                             | 8-30                      | Mucky silt loam, silt loam, very fine                                                                                                                      | SM, MH, ML                             | A-5, A-4                             | 40-60                     | NP-5                    |
|                             | <br>  30-60<br> <br>      | sandy loam<br> Gravelly very fine sandy loam, gravelly silt<br>  loam, gravelly sandy loam, gravelly fine<br>  sandy loam, silt loam, very fine sandy loam | <br>  ML, SM<br> <br>                  | <br>  A-4, A-1<br>                   | <br>  5-30<br> <br>       | <br> NP-5<br> <br>      |
| 586:                        | <br>                      |                                                                                                                                                            | <br>                                   |                                      | <br>                      |                         |
| Kachemak, cool              | 0-3<br>3-8                | Slightly decomposed plant material<br> Silt loam, very fine sandy loam, mucky<br>  silt loam                                                               | PT<br>  ML, SM, MH<br>                 | A-8<br>A-4, A-5                      | <br>  40-60               | <br> NP-5<br>           |
|                             | 8-30                      | Mucky silt loam, silt loam, very fine<br>  sandy loam                                                                                                      | SM, MH, ML                             | A-5, A-4                             | 40-60                     | NP-5                    |
|                             | 30-60                     | Gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, gravelly very fine sandy loam, very fine sandy loam, silt loam                          | ML, SM<br> <br>                        | A-4, A-1<br>                         | <br>  5-30<br> <br>       | NP-5<br>                |
| Snowdance                   | <br>  0-3<br>  3-8        | <br> Slightly decomposed plant material<br> Mucky silt loam, very fine sandy loam,                                                                         | <br>  PT<br>  MH, ML                   | <br>  A-8<br>  A-5, A-4              | <br> <br>  40-60          | <br> <br> NP-5          |
|                             | <br>  8-24<br>  24-60<br> | silt loam<br> Gravelly silt loam, silt loam, cobbly silt loam<br> Very gravelly fine sandy loam, very cobbly<br>  sandy loam, very gravelly sandy loam     | <br>  MH, ML, SM<br> GM, SC-SM, SM<br> | <br>  A-5, A-4<br> A-1, A-2, A-4<br> | <br>  40-60<br>  0-15<br> | <br> NP-5<br> NP-5<br>  |
| 587:                        |                           |                                                                                                                                                            |                                        |                                      | <u> </u>                  |                         |
| Kachemak, cool              |                           | Slightly decomposed plant material<br> Mucky silt loam, very fine sandy loam,                                                                              | PT<br> ML, SM, MH                      | A-8<br>  A-4, A-5                    | <br>  40-60               | <br> NP-5               |
|                             | <br>  8-30                | silt loam<br>Silt loam, very fine sandy loam, mucky                                                                                                        | SM, MH, ML                             | A-5, A-4                             | <br>  40-60               | NP-5                    |
|                             | <br>  30-60<br> <br>      | silt loam<br> Gravelly very fine sandy loam, gravelly<br>  fine sandy loam, gravelly silt loam, gravelly<br>  sandy loam, very fine sandy loam, silt loam  | <br>  ML, SM<br> <br>                  | <br>  A-4, A-1<br> <br>              | <br>  5-30<br> <br>       | <br> NP-5<br> <br>      |
| Snowdance                   | <br>  0-3<br>  3-8        | <br> Slightly decomposed plant material<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                                          | <br>  PT<br>  MH, ML                   | <br>  A-8<br>  A-5, A-4              | <br> <br>  40-60          | <br> <br> NP-5          |
|                             | <br>  8-24<br>  24-60     | Sainty loain<br> Gravelly silt loam, cobbly silt loam, silt loam<br> Very cobbly sandy loam, very gravelly<br>  sandy loam, very gravelly fine sandy loam  | <br>  MH, ML, SM<br> GM, SC-SM, SM<br> | <br>  A-5, A-4<br> A-1, A-2, A-4<br> | <br>  40-60<br>  0-15<br> | <br> NP-5<br> NP-5      |

Table 8. Engineering Index Properties—Continued

| Map symbol<br>and soil name | <br>  Depth                       | <br>  Depth   USDA texture                                                                                                                           | Classification                               |                                               | <br>  Liquid                              | <br> Plas-                        |
|-----------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------|-------------------------------------------|-----------------------------------|
|                             | <br>                              | i<br>                                                                                                                                                | <br> <br>  Unified<br>                       | <br>  AASHTO                                  | limit                                     | ticity<br>index                   |
|                             | In.                               |                                                                                                                                                      |                                              |                                               | Pct.                                      | ļ                                 |
| 588:                        | <br>                              | <br>                                                                                                                                                 | <br>                                         |                                               | l<br>I                                    |                                   |
| Kachemak, cool              | 0-3<br>3-8                        | Slightly decomposed plant material   Silt loam, mucky silt loam, very fine                                                                           | PT<br>  ML, SM, MH                           | A-8<br>A-4, A-5                               | <br>  40-60                               | <br>NP-5                          |
|                             | <br>  8-30<br>                    | sandy loam Very fine sandy loam, silt loam, mucky silt loam                                                                                          | SM, MH, ML                                   | A-5, A-4                                      | <br>  40-60<br>                           | NP-5                              |
|                             | 30-60<br> <br>                    | Gravelly very fine sandy loam, gravelly sandy loam, very fine sandy loam, silt loam, gravelly silt loam, gravelly fine sandy loam                    | ML, SM                                       | A-4, A-1                                      | <br>  5-30<br> <br>                       | NP-5<br> <br>                     |
| Snowdance                   | <br>  0-3<br>  3-8                | <br> Slightly decomposed plant material<br> Mucky silt loam, silt loam, very fine<br>  sandy loam                                                    | <br>  PT<br>  MH, ML                         | A-8<br>  A-5, A-4                             | <br> <br>  40-60                          | <br> <br> NP-5                    |
|                             | <br>  8-24<br>  24-60<br>         | Gravelly silt loam, cobbly silt loam, silt loam Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam                      | <br>  MH, ML, SM<br> GM, SC-SM, SM<br>       | A-5, A-4<br>A-1, A-2, A-4                     | <br>  40-60<br>  0-15<br>                 | <br> NP-5<br> NP-5                |
| 589:                        | <u> </u>                          |                                                                                                                                                      |                                              |                                               |                                           |                                   |
| Kalifonsky                  | 0-2<br>  2-9                      | Moderately decomposed plant material<br> Silt loam                                                                                                   | PT<br>  ML                                   | A-8<br>  A-4                                  | <br>  30-35                               | <br> NP-5                         |
|                             |                                   | Silt loam, very fine sandy loam<br> Gravelly sand, gravelly loamy sand,<br>  sand, loamy sand                                                        | ML<br>  ML<br> SP-SM, SM, SP<br>             | A-4<br>  A-1, A-2                             | 30-35<br>  0-0<br>                        | NP-5<br>  NP                      |
| 590:                        | !<br>                             |                                                                                                                                                      |                                              |                                               |                                           |                                   |
| Kalifonsky                  | 0-2<br>  2-9<br>  9-16<br>  16-60 | Moderately decomposed plant material<br> Silt loam<br> Silt loam, very fine sandy loam<br> Gravelly sand, loamy sand, gravelly<br>  loamy sand, sand | PT<br>  ML<br>  ML<br> SP-SM, SM, SP<br>     | A-8<br>  A-4<br>  A-4<br>  A-1, A-2           | <br>  30-35<br>  30-35<br>  0-0           | <br> NP-5<br> NP-5<br>  NP        |
| 591:                        | <br>                              | <br>                                                                                                                                                 | <br>                                         |                                               | <br>                                      |                                   |
| Kalifonsky                  |                                   | Moderately decomposed plant material  Silt loam  Silt loam, very fine sandy loam  Gravelly loamy sand, gravelly sand,   sand, loamy sand             | PT<br>  ML<br>  ML<br> SP-SM, SM, SP<br>     | A-8<br>  A-4<br>  A-4<br>  A-1, A-2           | <br>  30-35<br>  30-35<br>  0-0           | <br> NP-5<br> NP-5<br>  NP        |
| Typic Cryorthents           | <br>  0-1<br>                     | <br> Gravelly slightly decomposed plant<br>  material, slightly decomposed plant<br>  material                                                       | <br>  PT<br>                                 | A-8                                           | <br> <br>                                 |                                   |
|                             | 1-33                              | Very fine sandy loam, silty clay loam,                                                                                                               | SM, CL                                       | A-2, A-1, A-6                                 | 25-40                                     | NP-25                             |
|                             | <br>  33-60<br>                   | gravelly very fine sandy loam Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam                                                  | <br>  CL, GM<br>                             | <br> A-1, A-4, A-6<br>                        | <br>  25-40<br>                           | <br> NP-25<br>                    |
| 592:                        |                                   | <u> </u>                                                                                                                                             |                                              |                                               | <u> </u>                                  |                                   |
| Karluk                      | 10-17                             | Highly decomposed plant material<br> Silt loam<br> Silt loam<br> Silt loam                                                                           | PT<br>  ML<br>  ML<br>  ML                   | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-5, A-4 | <br>  40-60<br>  40-60<br>  35-55         | <br> NP-10<br> NP-10<br> NP-10    |
| 593:<br>Kashwitna           |                                   | <br> Slightly decomposed plant material<br> Silt loam<br> Very fine sandy loam, silt loam<br> Very gravelly sand, very gravelly loamy<br>  sand      | <br>  PT<br>  ML<br>  ML<br>  GP, SM, SP<br> | <br>  A-8<br>  A-5<br>  A-5, A-4<br>  A-1     | <br> <br> <br>  40-50<br>  40-50<br>  0-0 | <br> <br> NP-10<br> NP-10<br>  NP |

Table 8. Engineering Index Properties—Continued

| Map symbol<br>and soil name            | <br>  Depth                                          | USDA texture                                                                                                                                                                                 | Classification                                 |                                                        | <br> Liquid                                       | <br> Plas-                                 |
|----------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------|---------------------------------------------------|--------------------------------------------|
|                                        |                                                      |                                                                                                                                                                                              | <br>  Unified<br>                              | <br>  AASHTO                                           | limit                                             | ticity<br>index                            |
|                                        | In.                                                  |                                                                                                                                                                                              |                                                |                                                        | Pct.                                              |                                            |
| 594:<br>Kashwitna                      | <br>  0-3<br>  3-5<br>  5-21<br>  21-60              | Slightly decomposed plant material   Silt loam   Very fine sandy loam, silt loam   Very gravelly loamy sand, very gravelly   sand                                                            | PT<br>ML<br>ML<br>GP, SM, SP                   | <br>  A-8<br>  A-5<br>  A-5, A-4<br>  A-1              | <br> <br>  40-50<br>  40-50<br>  0-0              | <br> <br> NP-10<br> NP-10<br>  NP          |
| 595:                                   | l<br>l                                               |                                                                                                                                                                                              |                                                | -                                                      | }                                                 |                                            |
| Kashwitna                              | 0-3<br>3-5<br>5-21<br>21-60                          | Slightly decomposed plant material   Silt loam   Very fine sandy loam, silt loam   Very gravelly sand, very gravelly loamy   sand                                                            | PT<br>ML<br>ML<br>GP, SM, SP                   | A-8<br>A-5<br>A-5, A-4<br>A-1                          | <br>  40-50<br>  40-50<br>  0-0                   | <br> NP-10<br> NP-10<br>  NP               |
| 596:<br>Kashwitna, moderately<br>steep | <br>  0-3<br>  3-5<br>  5-21<br>  21-60              | Slightly decomposed plant material   Silt loam   Very fine sandy loam, silt loam   Very gravelly loamy sand, very gravelly   sand                                                            | <br>  PT<br>  ML<br>  ML<br>  GP, SM, SP       | A-8<br>  A-5<br>  A-5, A-4<br>  A-1                    | <br> <br>  40-50<br>  40-50<br>  0-0              | <br> <br> NP-10<br> NP-10<br>  NP          |
| Kashwitna, strongly sloping            | 0-3<br>  3-5<br>  5-21<br>  21-60                    | Slightly decomposed plant material   Silt loam   Silt loam, very fine sandy loam   Very gravelly sand, very gravelly loamy   sand                                                            | PT<br>  ML<br>  ML<br>  GP, SM, SP             | A-8<br>  A-5<br>  A-5, A-4<br>  A-1                    | <br>  40-50<br>  40-50<br>  0-0                   | <br> NP-10<br> NP-10<br>  NP               |
| 597:                                   |                                                      | 1                                                                                                                                                                                            |                                                | 1                                                      |                                                   |                                            |
| Kenai                                  |                                                      | Moderately decomposed plant material Very fine sandy loam, silt loam Very fine sandy loam, silt loam Silt loam, loam, very fine sandy loam Silt loay loam, silt loam, gravelly loam          | PT   MH, ML   MH, ML   ML, SM   CL             | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4<br>A-6, A-4         | <br>  40-60<br>  40-60<br>  25-35<br>  30-40      | <br> NP-5<br> NP-5<br> NP-5<br> 10-30      |
| 598:<br>Kenai                          |                                                      | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Loam, very fine sandy loam, silt loam   Gravelly loam, silty clay loam, silt loam | PT<br>MH, ML<br>MH, ML<br>ML, SM               | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br>  40-60<br>  40-60<br>  25-35<br>  30-40      | <br> <br> NP-5<br> NP-5<br> NP-5<br> 10-30 |
| 599:<br>Kenai                          | <br> -  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 |                                                                                                                                                                                              | PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br> <br>  40-60<br>  40-60<br>  25-35<br>  30-40 | <br> <br> NP-5<br> NP-5<br> NP-5           |
| 600:<br>Kenai                          | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60   | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Silt loam, loam, very fine sandy loam   Silt loam, gravelly loam, silty clay loam | PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br>  40-60<br>  40-60<br>  25-35<br>  30-40      | <br> <br> NP-5<br> NP-5<br> NP-5<br> 10-30 |
| 601:<br>Kenai                          | <br>                                                 |                                                                                                                                                                                              | PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br> <br>  40-60<br>  40-60<br>  25-35<br>  30-40 | <br> <br> NP-5<br> NP-5<br> NP-5<br> 10-30 |

Table 8. Engineering Index Properties—Continued

| Map symbol                      | <br>  Depth                 | USDA texture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Classification                                                                |                                                              | <br> Liquid                                         | <br> Plas-                                 |
|---------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------|
| and soil name                   | <br>                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <br>  Unified                                                                 | <br>  AASHTO                                                 | limit                                               | ticity<br>index                            |
|                                 | In.                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                               | <br>                                                         | Pct.                                                | -                                          |
| 602:<br>Kenai, moderately steep | 2-6                         | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Silt loam, loam, very fine sandy loam   Silt loam, gravelly loam, silty clay loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <br>  PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL                          | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4 | <br> <br> 40-60<br> 40-60<br> 25-35<br> 30-40       | <br> <br> NP-5<br> NP-5<br> NP-5<br> 10-30 |
| Kenai, gently sloping           | 2-6<br>  6-19<br>  19-24    | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Silt loam, loam, very fine sandy loam   Gravelly loam, silt loam, silty clay loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL                                | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4<br>  A-6, A-4       | <br>  40-60<br>  40-60<br>  25-35<br>  30-40        | <br> <br> NP-5<br> NP-5<br> NP-5<br> 10-30 |
| 603:<br>Kenai                   | 2-6<br>6-19<br>19-24        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <br>  PT<br>  MH, ML<br>  MH, ML<br>  ML, SM<br>  CL                          | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4<br>A-6, A-4               | <br>  40-60<br>  40-60<br>  25-35<br>  30-40        | <br> <br> NP-5<br> NP-5<br> NP-5           |
| Starichkof                      | <br>  0-7<br>  7-60<br>     | Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PT<br>PT                                                                      | <br>  A-8<br>  A-8<br>                                       | <br>                                                | <br>                                       |
| 604:<br>Kichatna                |                             | <br>  <br> Slightly decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <br>  PT                                                                      | <br> <br>  A-8                                               |                                                     | <br>                                       |
|                                 | 2-4<br>  4-11<br>  11-14    | Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Very gravelly loamy coarse sand, very                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ML, MH<br>  MH, ML<br>  GM, SC-SM,                                            | A-4, A-5<br>  A-5, A-4<br>  A-1                              | 40-60<br>  40-60<br>  0-15                          | NP-5<br> NP-5<br> NP-5                     |
|                                 | <br>  14-60<br> <br>        | gravelly sandy loam  Very gravelly sand, extremely gravelly   coarse sand, extremely gravelly loamy   coarse sand, very gravelly loamy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | GW-GM<br> GM, GP, GP-GM<br> <br>                                              | <br>  A-1<br> <br>                                           | 0-0                                                 | <br>  NP<br> <br>                          |
| 605:<br>Kichatna                | 2-4<br>  4-11<br> 11-14<br> | Slightly decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sandy loam, very gravelly   loamy coarse sand   Very gravelly loamy sand, very gravelly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <br>  PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM | <br>  A-8<br>  A-4, A-5<br>  A-5, A-4<br>  A-1<br>           | <br> <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0 | <br> <br> NP-5<br> NP-5<br> NP-5<br>       |
| 000                             | <br> <br>                   | sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                               | <br>                                                         |                                                     |                                            |
| 606:<br>Kichatna                | j                           | Slightly decomposed plant material   Slit loam, very fine sandy loam   Slit loam, very fine sandy loam   Very gravelly sandy loam, very gravelly   loamy coarse sand   Extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly coarse sand,   extremely gravelly gravelly coarse sand,   extremely gravelly gravelly gravelly gravelly gravelly | PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM       | <br>  A-8<br>  A-4, A-5<br>  A-5, A-4<br>  A-1               | <br> <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0 | <br> <br> NP-5<br> NP-5<br> NP-5           |
|                                 |                             | extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                               | <br> <br>                                                    |                                                     |                                            |

Table 8. Engineering Index Properties—Continued

| Map symbol    | <br>  Depth                       | USDA texture                                                                                                                                                                                                                                                                                        | Classification                                                          |                                                         | <br>  Liguid                                   | <br> Plas-                            |
|---------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------|---------------------------------------|
| and soil name |                                   |                                                                                                                                                                                                                                                                                                     | Unified                                                                 | AASHTO                                                  | limit                                          | ticity<br>index                       |
| 607:          | In.                               |                                                                                                                                                                                                                                                                                                     |                                                                         |                                                         | Pct.                                           |                                       |
| Kichatna      | 11-14<br>                         | Slightly decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sandy loam, very gravelly loamy coarse sand   Extremely gravelly loamy coarse sand,   extremely gravelly coarse sand, very   gravelly sand, very gravelly loamy sand         | PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM | <br>  A-8<br>  A-4, A-5<br>  A-5, A-4<br>  A-1<br>  A-1 | <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0 | <br> NP-5<br> NP-5<br> NP-5<br>  NP-5 |
| 608:          | -                                 | <br>                                                                                                                                                                                                                                                                                                |                                                                         | <br>                                                    |                                                |                                       |
| Kichatna      | j                                 | Slightly decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sandy loam, very gravelly   loamy coarse sand   Extremely gravelly loamy coarse sand,   extremely gravelly coarse sand, very   gravelly loamy sand, very gravelly loamy sand | PT   ML, MH   MH, ML   GM, SC-SM,   GW-GM  GM, GP, GP-GM                | A-8<br>  A-4, A-5<br>  A-5, A-4<br>  A-1<br>  A-1       | <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0 | <br> NP-5<br> NP-5<br> NP-5<br>  NP-5 |
| 609:          |                                   | <u>                                     </u>                                                                                                                                                                                                                                                        | <u> </u>                                                                |                                                         | į                                              | į                                     |
| Kichatna      | İ                                 | Slightly decomposed plant material<br> Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Very gravelly loamy coarse sand, very<br>  gravelly sandy loam<br> Very gravelly sand, extremely gravelly                                                                            | PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM | A-8<br>  A-4, A-5<br>  A-5, A-4<br>  A-1<br>            | <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0 | <br> NP-5<br> NP-5<br> NP-5<br>       |
|               |                                   | loamy coarse sand, extremely gravelly coarse sand, very gravelly loamy sand                                                                                                                                                                                                                         |                                                                         | <br> <br>                                               |                                                | <br> <br>                             |
| Killey        | 0-2<br>  2-6<br>  6-29<br>  29-60 | Slightly decomposed plant material<br> Silt loam<br> Stratified fine sand to silt loam<br> Very gravelly sand, very gravelly<br>  coarse sand                                                                                                                                                       | PT<br>  ML<br>  SM<br>  SP-SM, GP                                       | A-8<br>  A-4<br>  A-4, A-2<br>  A-1                     | <br>  30-35<br>  0-15<br>  0-0                 | <br> NP-5<br>  NP<br>  NP             |
| 610:          |                                   |                                                                                                                                                                                                                                                                                                     |                                                                         | <br>                                                    |                                                | 1                                     |
| Kidazqeni     | 0-4<br>  4-21<br>  21-60          | Silt loam<br> Stratified sand to silt loam<br> Very cobbly sand, extremely gravelly<br>  sand, very gravelly sand                                                                                                                                                                                   | ML<br> SM, ML, SP-SM<br>  SW, SW-SM<br>                                 | A-4<br>  A-2, A-4<br>  A-1<br>                          | 25-35<br>0-15<br>0-0                           | NP-10<br>  NP<br>  NP<br>             |
| 611:          |                                   |                                                                                                                                                                                                                                                                                                     |                                                                         |                                                         | İ                                              | i                                     |
| Killey        | 0-2<br>  2-6<br>  6-29<br>  29-60 | Slightly decomposed plant material<br> Silt loam<br> Stratified fine sand to silt loam<br> Very gravelly sand, very gravelly coarse<br>  sand                                                                                                                                                       | PT<br>  ML<br>  SM<br>  SP-SM, GP                                       | A-8<br>  A-4<br>  A-4, A-2<br>  A-1                     | <br>  30-35<br>  0-15<br>  0-0                 | <br> NP-5<br>  NP<br>  NP             |
| Moose River   | 0-5<br>  5-10<br>  10-39          | <br> Slightly decomposed plant material<br> Silt loam<br> Stratified gravelly fine sand to silt loam,<br>  stratified fine sand to silt loam to<br>  slightly decomposed plant material                                                                                                             | PT   ML   SP-SM, SM,   CL-ML                                            | <br>  A-8<br>  A-4<br>  A-4, A-1<br>                    | <br> <br>  30-40<br>  10-15<br>                | <br> <br> NP-5<br> NP-5<br>           |
|               | 39-60                             | Very gravelly sand                                                                                                                                                                                                                                                                                  | SP-SM, SP                                                               | <br>  A-1<br>                                           | 0-0                                            | NP                                    |
| 612:          |                                   |                                                                                                                                                                                                                                                                                                     | į pr                                                                    |                                                         | į                                              | į                                     |
| Liten         | 0-2<br>  2-8<br>                  | Slightly decomposed plant material  Very fine sandy loam, fine sandy loam,   silt loam                                                                                                                                                                                                              | PT<br>  MH, ML<br>                                                      | A-8<br>  A-5, A-4<br>                                   | <br>  30-60<br>                                | <br> NP-5<br>                         |
|               | 8-60                              | Sand, loamy sand                                                                                                                                                                                                                                                                                    | SM, SP-SM                                                               | A-3                                                     | 0-5                                            | NP-2                                  |

Table 8. Engineering Index Properties—Continued

| Map symbol                  | <br>  Depth                                  | USDA texture                                                                                                                                                                                                                | Classification                                                         |                                                             | <br>  Liquid                                | <br> Plas-                           |
|-----------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------|--------------------------------------|
| and soil name               | <br> <br>                                    |                                                                                                                                                                                                                             | <br>  Unified<br>                                                      | <br>  AASHTO                                                | limit<br> <br>                              | ticity<br>index                      |
|                             | In.                                          |                                                                                                                                                                                                                             |                                                                        |                                                             | Pct.                                        | <u> </u>                             |
| 613:<br>Lithic Haplocryands | <br> <br>  0-2<br>                           | <br> <br> Slightly decomposed plant material,<br>  moderately decomposed plant material,                                                                                                                                    | <br> <br>  PT<br>                                                      | <br> <br>  A-8                                              | <br> <br>                                   |                                      |
|                             | <br>  2-12<br>                               | highly decomposed plant material<br>Gravelly silt loam, gravelly very fine sandy<br>loam, silt loam, very gravelly silt loam                                                                                                | <br>  GM<br>                                                           | <br>  A-5, A-1<br>                                          | <br>  40-60<br>                             | <br> NP-5<br>                        |
|                             | 12-60<br>                                    | Bedrock                                                                                                                                                                                                                     | <u> </u>                                                               |                                                             | <br>                                        |                                      |
| Alic Haplocryands           | 4-21<br>  21-31<br>                          | Moderately decomposed plant material   Very gravelly very fine sandy loam, silt loam   Gravelly fine sandy loam, silt loam,   very gravelly sandy loam                                                                      | PT<br>  GM, ML<br>  GM, ML                                             | A-8<br>A-1, A-5<br>A-2-4, A-4, A                            | į                                           | <br> NP-5<br> NP-5                   |
|                             | 31-60<br>                                    | Bedrock                                                                                                                                                                                                                     |                                                                        |                                                             | <br>                                        |                                      |
| Rock outcrop                | ļ                                            | ļ                                                                                                                                                                                                                           |                                                                        | j                                                           | ļ                                           | j                                    |
| 614:<br>Lithic Haplocryands | <br> <br>  0-2<br>                           | <br> <br> Moderately decomposed plant material,<br>  highly decomposed plant material,                                                                                                                                      | <br> <br>  PT<br>                                                      | <br> <br>  A-8                                              | <br> <br> <br>                              | <br>                                 |
|                             | <br>  2-12<br>                               | slightly decomposed plant material<br> Silt loam, very gravelly silt loam, gravelly<br>  very fine sandy loam, gravelly silt loam                                                                                           | <br>  GM<br>                                                           | <br>  A-5, A-1<br>                                          | <br>  40-60<br>                             | j<br> NP-5<br>                       |
|                             | 12-60                                        | Bedrock                                                                                                                                                                                                                     |                                                                        | į                                                           | į                                           | ļ                                    |
| Alic Haplocryands           | 4-21<br>  21-31<br>                          | Moderately decomposed plant material   Silt loam, very gravelly very fine sandy loam   Gravelly fine sandy loam, silt loam,   very gravelly sandy loam                                                                      | <br>  PT<br>  GM, ML<br>  GM, ML                                       | A-8<br>  A-1, A-5<br> A-1, A-2-4, A<br>  4                  | <br> <br>  40-60<br>  0-30<br>              | <br> <br> NP-5<br> NP-5              |
|                             | 31-60<br>                                    | Bedrock                                                                                                                                                                                                                     |                                                                        |                                                             | <br>                                        |                                      |
| Rock outcrop                |                                              |                                                                                                                                                                                                                             |                                                                        | ļ                                                           | ļ                                           | ļ                                    |
| 615:                        | <br>                                         |                                                                                                                                                                                                                             |                                                                        |                                                             | <br>                                        |                                      |
| Longmare                    | 18-29                                        | Moderately decomposed plant material  Silt loam, very fine sandy loam  Very fine sandy loam, silt loam  Very fine sandy loam, silt loam  Gravelly loamy sand, stratified gravelly   sand to silt loam, sand, loamy sand     | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, MH, SM<br>  ML, SM, SP<br> | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-5<br>A-1, A-4         | <br>  40-60<br>  40-60<br>  40-60<br>  0-25 | <br> NP-5<br> NP-5<br> NP-5<br> NP-2 |
| 616:                        |                                              | <u>                                      </u>                                                                                                                                                                               |                                                                        |                                                             | į                                           | į                                    |
| Longmare                    | 0-3<br>  4-6<br>  6-18<br>  18-29<br>  29-60 | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Gravelly loamy sand, stratified gravelly   sand to silt loam, sand, loamy sand | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, MH, SM<br>  ML, SM, SP<br> | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-5<br>  A-1, A-4 | <br>  40-60<br>  40-60<br>  40-60<br>  0-25 | <br> NP-5<br> NP-5<br> NP-5<br> NP-2 |
| 617:                        |                                              |                                                                                                                                                                                                                             | <br>                                                                   |                                                             | <br>                                        |                                      |
| Mutnala                     | 0-4<br>4-7                                   | Moderately decomposed plant material Very fine sandy loam, mucky silt loam, silt loam                                                                                                                                       | PT<br>  MH, SM<br>                                                     | A-8<br>  A-5<br>                                            | <br>  50-70<br>                             | <br> NP-5<br>                        |
|                             | 7-23<br>23-60                                | Silt loam, very fine sandy loam<br> Gravelly sandy loam, silt loam, cobbly<br>  fine sandy loam, very fine sandy loam                                                                                                       | MH, SM<br>CL-ML, SM                                                    | A-5, A-2<br>A-2, A-4, A-1                                   | 50-70<br>0-25                               | NP-5<br> NP-5<br>                    |

Table 8. Engineering Index Properties—Continued

| Map symbol    | <br>  Depth                     | USDA texture                                                                                                                               | Classification                 | n                           | <br>  Liquid                    | <br> Plas-              |
|---------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------|---------------------------------|-------------------------|
| and soil name |                                 | <br>                                                                                                                                       | Unified                        | AASHTO                      | limit<br> <br>                  | ticity<br>index         |
|               | ln.                             |                                                                                                                                            | į                              | <u> </u>                    | Pct.                            | <u> </u>                |
| 618:          | 1                               |                                                                                                                                            |                                | -                           | <br>                            |                         |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material   Mucky silt loam, silt loam, very fine                                                               | PT<br>MH, SM                   | A-8<br>A-5                  | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>23-60                   | sandy loam Silt loam, very fine sandy loam Silt loam, cobbly fine sandy loam, very fine sandy loam, gravelly sandy loam                    | MH, SM<br>CL-ML, SM            | A-5, A-2<br> A-2, A-4, A-1  | <br>  50-70<br>  0-25<br>       | <br> NP-5<br> NP-5<br>  |
| 619:          | 1                               |                                                                                                                                            |                                | -                           |                                 | 1                       |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material<br> Very fine sandy loam, mucky silt loam,<br>  silt loam                                             | PT<br>MH, SM                   | A-8<br>  A-5                | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>23-60                   | Silt loam, very fine sandy loam<br> Cobbly fine sandy loam, silt loam, very<br>  fine sandy loam, gravelly sandy loam                      | MH, SM<br>CL-ML, SM            | A-5, A-2<br>A-2, A-4, A-1   | 50-70<br>  0-25                 | NP-5<br> NP-5           |
| 620:          |                                 |                                                                                                                                            |                                | -                           | <br>                            |                         |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material<br> Very fine sandy loam, mucky silt loam,<br>  silt loam                                             | PT<br>MH, SM                   | A-8<br>A-5                  | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>  23-60                 | Very fine sandy loam, silt loam<br>  Very fine sandy loam, cobbly fine sandy<br>  loam, gravelly sandy loam, silt loam                     | MH, SM<br>CL-ML, SM            | A-5, A-2<br>A-2, A-4, A-1   | 50-70<br>  0-25                 | NP-5<br> NP-5<br>       |
| 621:          |                                 |                                                                                                                                            |                                | -                           | <br>                            |                         |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material   Silt loam, mucky silt loam, very fine   sandy loam                                                  | PT<br>MH, SM                   | A-8<br>A-5                  | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>23-60                   | Silt loam, very fine sandy loam<br>  Gravelly sandy loam, very fine sandy<br>  loam, cobbly fine sandy loam, silt loam                     | MH, SM<br>CL-ML, SM            | A-5, A-2<br>A-2, A-4, A-1   | 50-70<br>0-25                   | NP-5<br> NP-5           |
| 622:          | 1                               |                                                                                                                                            |                                |                             | <br>                            |                         |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material<br> Very fine sandy loam, mucky silt loam,<br>  silt loam                                             | PT<br>MH, SM                   | A-8<br>  A-5                | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>23-60                   | Silt loam, very fine sandy loam<br> Gravelly sandy loam, very fine sandy<br>  loam, cobbly fine sandy loam, silt loam                      | MH, SM<br>CL-ML, SM            | A-5, A-2<br>A-2, A-4, A-1   | 50-70<br>0-25                   | NP-5<br> NP-5           |
| 623:          | 1                               |                                                                                                                                            |                                | i                           | i                               | 1                       |
| Mutnala       | -  0-4<br>  4-7                 | Moderately decomposed plant material<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                             | PT<br>MH, SM                   | A-8<br>  A-5                | <br>  50-70                     | <br> NP-5               |
|               | 7-23<br>  23-60                 | Silt loam, very fine sandy loam<br> Gravelly sandy loam, very fine sandy<br>  loam, cobbly fine sandy loam, silt loam                      | MH, SM<br>CL-ML, SM            | A-5, A-2<br>A-2, A-4, A-1   | 50-70<br>  0-25                 | NP-5<br> NP-5<br>       |
| Starichkof    | <br>-  0-7<br>  7-60            | <br> Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                         | PT<br>PT                       | A-8<br>  A-8                | <br> <br>                       | <br>                    |
| Slikok        | <br>-  0-13<br> 13-51<br> 51-60 | Peat   Mucky silt loam, silt loam   Fine sandy loam, silt loam, very gravelly   sandy loam, gravelly silt loam, gravelly   fine sandy loam | PT<br>  ML, OH, OL<br>  GM, ML | A-8<br>A-5, A-4<br>A-2, A-4 | <br> <br>  40-60<br>  10-35<br> | <br> <br> NP-5<br> NP-5 |

Table 8. Engineering Index Properties—Continued

| Map symbol       | <br>  Depth                                  | USDA texture                                                                                                                                                                                                                                                                                                                         | Classification                                                 |                                    | <br>  Liquid                         | <br> Plas-                       |
|------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------|--------------------------------------|----------------------------------|
| and soil name    |                                              |                                                                                                                                                                                                                                                                                                                                      | Unified                                                        | AASHTO                             | limit                                | ticity<br>index                  |
|                  | ln.                                          |                                                                                                                                                                                                                                                                                                                                      |                                                                |                                    | Pct.                                 |                                  |
| 624:             | <br>                                         | <br>                                                                                                                                                                                                                                                                                                                                 |                                                                |                                    |                                      |                                  |
| Naptowne         | 0-3                                          | Slightly decomposed plant material,<br>  moderately decomposed plant material                                                                                                                                                                                                                                                        | PT                                                             | A-8                                |                                      |                                  |
|                  | 3-14                                         | Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam                                                                                                                                                                                                                                                                  | MH, ML, SM                                                     | A-5, A-4<br>A-4                    | 40-60                                | NP-5                             |
|                  | 13-20<br>  20-60<br> <br>                    | Very cobbly silt loam, very gravelly   sandy loam, gravelly very fine sandy   loam, very gravelly fine sandy loam, very   gravelly silt loam, gravelly loamy sand                                                                                                                                                                    | IML, SM<br> GW-GM, GM, SM<br> <br>                             | A-4<br>A-4, A-1                    | 20-30<br>  0-30<br> <br>             | NP-5<br> NP-5<br> <br>           |
| 625:             |                                              |                                                                                                                                                                                                                                                                                                                                      |                                                                |                                    |                                      |                                  |
| Naptowne         | 0-3                                          | Moderately decomposed plant material,<br>  slightly decomposed plant material                                                                                                                                                                                                                                                        | PT                                                             | A-8                                |                                      |                                  |
|                  | 3-14                                         | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                      | ML, MH, SM                                                     | A-5, A-4                           | <br>  40-60                          | <br> NP-5                        |
|                  |                                              | Very fine sandy loam, silt loam<br> Very gravelly sandy loam, gravelly very<br>  fine sandy loam, gravelly loamy sand,<br>  very gravelly silt loam, very cobbly<br>  silt loam, very gravelly fine sandy loam                                                                                                                       | ML, SM<br> GW-GM, GM, SM  <br> <br>                            | A-4<br>A-4, A-1                    | 20-30<br>  0-30<br>                  | NP-5<br> NP-5<br>                |
| 626:             |                                              |                                                                                                                                                                                                                                                                                                                                      |                                                                |                                    | ļ                                    |                                  |
| Naptowne         | 0-3                                          | Moderately decomposed plant material,<br>  slightly decomposed plant material                                                                                                                                                                                                                                                        | PT                                                             | A-8                                |                                      |                                  |
|                  |                                              | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                      | MH, ML, SM                                                     | A-5, A-4                           | 40-60                                | NP-5                             |
|                  |                                              | Very fine sandy loam, silt loam<br> Gravelly loamy sand, very gravelly silt<br>  loam, very gravelly fine sandy loam,<br>  gravelly very fine sandy loam, very<br>  cobbly silt loam, very gravelly sandy loam                                                                                                                       | ML, SM<br> GW-GM, GM, SM  <br> <br> <br>                       | A-4<br>A-4, A-1                    | 20-30<br>  0-30<br> <br>             | NP-5<br> NP-5<br> <br> <br>      |
| 627:             |                                              |                                                                                                                                                                                                                                                                                                                                      |                                                                |                                    | ļ                                    |                                  |
| Naptowne         | 0-3<br> <br>  3-14<br>  13-20<br>  20-60<br> | Slightly decomposed plant material,<br>  moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly loamy sand, very gravelly silt<br>  loam, very gravelly fine sandy loam,<br>  gravelly very fine sandy loam, very<br>  cobbly silt loam, very gravelly sandy loam | PT<br> <br>  MH, ML, SM<br>  ML, SM<br> GW-GM, GM, SM<br> <br> | A-8<br>A-5, A-4<br>A-4<br>A-4, A-1 | <br>  40-60<br>  20-30<br>  0-30<br> | <br> <br> NP-5<br> NP-5<br> NP-5 |
| 628:             |                                              |                                                                                                                                                                                                                                                                                                                                      |                                                                |                                    |                                      |                                  |
| Naptowne         | 0-3<br> <br>  3-14                           | Slightly decomposed plant material,<br>  moderately decomposed plant material<br> Silt loam, very fine sandy loam                                                                                                                                                                                                                    | PT                                                             | A-8<br>A-5, A-4                    | <br> <br>  40-60                     | <br> <br> NP-5                   |
|                  | 13-20                                        | Very fine sandy loam, silt loam   Gravelly loamy sand, very gravelly silt   loam, very gravelly fine sandy loam,   gravelly very fine sandy loam, very   cobbly silt loam, very gravelly sandy loam                                                                                                                                  | ML, SM<br> GW-GM, GM, SM                                       | A-4<br>A-4, A-1                    | 20-30<br>  0-30<br>                  | NP-5<br> NP-5<br> NP-5           |
| 629:<br>Naptowne | <br>  0-3                                    | <br> <br> Slightly decomposed plant material,                                                                                                                                                                                                                                                                                        | <br>  PT                                                       | A-8                                |                                      |                                  |
| · · ·            | 3-14<br>13-20                                | moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly fine sandy loam, very   cobbly silt loam, very gravelly sandy   loam, gravelly loamy sand, very gravelly   silt loam, gravelly very fine sandy loam                                                         | <br>  MH, ML, SM<br>  ML, SM<br> GW-GM, GM, SM<br>             | A-5, A-4<br>A-4<br>A-4, A-1        | <br>  40-60<br>  20-30<br>  0-30<br> | <br> NP-5<br> NP-5<br> NP-5      |

Table 8. Engineering Index Properties—Continued

| Map symbol                      | <br>  Depth                      | USDA texture                                                                                                                                                                                                                                       | Classification                                 |                                 | <br>  Liquid                     | <br> Plas-                      |
|---------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------|----------------------------------|---------------------------------|
| and soil name                   |                                  |                                                                                                                                                                                                                                                    | Unified                                        | AASHTO                          | limit                            | ticity<br>index                 |
|                                 | In.                              |                                                                                                                                                                                                                                                    |                                                |                                 | Pct.                             |                                 |
| 630: Naptowne, moderately steep | <br>  0-3<br>                    | <br>                                                                                                                                                                                                                                               | PT                                             | A-8                             |                                  |                                 |
| ·                               | 3-14<br>  13-20<br>  20-60<br>   | Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Gravelly loamy sand, very gravelly silt<br>  loam, gravelly very fine sandy loam,<br>  very gravelly sandy loam, very cobbly<br>  silt loam, very gravelly fine sandy loam | MH, ML, SM<br>  ML, SM<br> GW-GM, GM, SM<br>   | A-5, A-4<br>A-4<br>A-4, A-1     | 40-60<br>  20-30<br>  0-30<br>   | NP-5<br> NP-5<br> NP-5<br>      |
| Naptowne, strongly sloping      | 0-3                              | Moderately decomposed plant material,   slightly decomposed plant material                                                                                                                                                                         | PT                                             | A-8                             |                                  |                                 |
| Sioping                         | 3-14<br>  13-20<br>  20-60       | Very fine sandy loam, silt loam Very fine sandy loam, silt loam Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam                        | MH, ML, SM<br>ML, SM<br> GW-GM, GM, SM         | A-5, A-4<br>A-4<br>A-4, A-1     | 40-60<br>  20-30<br>  0-30<br>   | NP-5<br> NP-5<br> NP-5<br> NP-5 |
| 631:<br>Naptowne, strongly      | 0-3                              | <br> <br> Slightly decomposed plant material,                                                                                                                                                                                                      | PT                                             | A-8                             |                                  |                                 |
| sloping                         | <br>  3-14<br>  13-20<br>  20-60 | moderately decomposed plant material Silt loam, very fine sandy loam Silt loam, very fine sandy loam Very gravelly sandy loam, very cobbly silt loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very                           | <br>  MH, ML, SM<br>  ML, SM<br> GW-GM, GM, SM | A-5, A-4<br>A-4<br>A-4, A-1     | <br>  40-60<br>  20-30<br>  0-30 | <br> NP-5<br> NP-5<br> NP-5     |
|                                 | İ                                | gravelly silt loam, gravelly loamy sand                                                                                                                                                                                                            |                                                |                                 | İ                                |                                 |
| Naptowne, gently sloping        | 13-20                            | Moderately decomposed plant material,<br>  slightly decomposed plant material<br> Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam                                                                                              | PT<br> <br> MH, ML, SM<br>  ML, SM             | A-8<br> <br>  A-5, A-4<br>  A-4 | <br>  40-60<br>  20-30           | <br> <br> NP-5<br> NP-5         |
|                                 | 20-60<br> <br> <br>              | Very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand, gravelly very fine sandy loam                                                                                        | GW-GM, GM, SM<br> <br> <br>                    | A-4, A-1                        | 0-30                             | NP-5<br> <br> <br>              |
| 632:<br>Nillana                 |                                  | <br>                                                                                                                                                                                                                                               |                                                | 1 4 0                           |                                  |                                 |
| Niklason                        | 0-2<br>  2-6<br>  6-23           | Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, fine sandy loam,<br>  stratified sand to silt loam, loamy<br>  sand, sandy loam, silt loam                                                      | PT<br>  ML, SM<br> SM, ML, SP-SM<br>           | A-8<br>A-4<br>A-4, A-3          | 25-35<br>  0-15                  | <br> NP-5<br>  NP<br>           |
|                                 | 23-60                            | Very gravelly sand, extremely gravelly   sand, very gravelly loamy sand                                                                                                                                                                            | GP, SM, GW                                     | A-1                             | 0-0                              | <br>  NP<br>                    |
| 633:<br>Nikolaevsk              | <br>  0-2                        | <br> <br> Slightly decomposed plant material                                                                                                                                                                                                       | <br>  PT                                       | A-8                             | <br>                             |                                 |
|                                 | 2-20                             | Silt loam, very fine sandy loam, mucky<br>  silt loam, mucky very fine sandy loam                                                                                                                                                                  | <br>  MH<br>                                   | A-5                             | 50-70                            | NP-5                            |
|                                 | 20-60                            | Very gravelly loamy sand, very gravelly   sand, very cobbly loamy sand, gravelly   sand, cobbly loamy fine sand                                                                                                                                    | GP-GM, SP-SM<br> <br>                          | A-1                             | 0-14                             | <br> NP-5<br>                   |

Table 8. Engineering Index Properties—Continued

| Map symbol                | <br>  Depth     | USDA texture                                                                                                                                                                                                        | Classification                                |                                              | <br>  Liquid                     | <br> Plas-                   |
|---------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------|----------------------------------|------------------------------|
| and soil name             | <br> <br>       |                                                                                                                                                                                                                     | Unified                                       | <br>  AASHTO                                 | limit<br> <br>                   | ticity<br>index              |
|                           | In.             |                                                                                                                                                                                                                     |                                               |                                              | Pct.                             | ļ                            |
| 634:<br>Nikolaevsk        | 2-20<br>        | <br> Slightly decomposed plant material<br> Mucky very fine sandy loam, mucky silt<br>  loam, very fine sandy loam, silt loam<br> Very gravelly loamy sand, cobbly loamy<br>  fine sand, gravelly sand, very cobbly | <br>  PT<br>  MH<br> <br> GP-GM, SP-SM        | <br>  A-8<br>  A-5<br> <br>  A-1             | <br> <br> 50-70<br> <br>  0-14   | <br> <br> NP-5<br> <br> NP-5 |
|                           | į               | loamy sand, very gravelly sand                                                                                                                                                                                      | į                                             | į                                            | į                                | į                            |
| 635:<br>Nikolaevsk        |                 | <br>  <br> Slightly decomposed plant material<br> Mucky very fine sandy loam, mucky silt<br>  loam, very fine sandy loam, silt loam                                                                                 | <br> <br>  PT<br>  MH<br>                     | <br>  A-8<br>  A-5                           | <br> <br> <br>  50-70<br>        | <br> <br> NP-5               |
|                           | 20-60           | Very cobbly loamy sand, very gravelly<br>  sand, very gravelly loamy sand, cobbly<br>  loamy fine sand, gravelly sand                                                                                               | GP-GM, SP-SM                                  | A-1<br>                                      | 0-14<br> <br>                    | NP-5<br> <br>                |
| 636:<br>Nikolai           |                 | <br>                                                                                                                                                                                                                | <br> <br>  PT                                 | 40                                           | į                                |                              |
| NIKOIdi                   | 0-2<br>  2-32   | Peat<br> Muck                                                                                                                                                                                                       | PT                                            | A-8<br>  A-8                                 | <br>                             |                              |
|                           |                 | Silt loam, very fine sandy loam, fine sandy   loam, gravelly silt loam, gravelly very fine   sandy loam, gravelly fine sandy loam                                                                                   | MH, ML, SM<br> <br>                           | A-2, A-5                                     | <br>  0-60<br>                   | NP-5                         |
|                           | <br>  41-60<br> | Sand, gravelly sand, gravelly loamy<br>  sand, loamy sand, very gravelly loamy<br>  sand, very gravelly sand                                                                                                        | SM                                            | A-2, A-1                                     | 0-0<br>                          | NP                           |
| 637:<br>Nikolai, somewhat | <br> <br>  0-2  | <br> <br> Peat                                                                                                                                                                                                      | <br> <br>  PT                                 | <br>  A-8                                    | <br> <br>                        | ļ                            |
| poorly drained            |                 | Muck                                                                                                                                                                                                                | PT                                            | A-8                                          | <br>                             |                              |
| ,                         |                 | Gravelly fine sandy loam, gravelly very fine sandy loam, fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam                                                                                       | MH, ML, SM<br> <br>                           | A-2, A-5                                     | 0-60<br>                         | NP-5                         |
|                           | 41-60<br> <br>  | Loamy sand, sand, gravelly loamy sand,<br>gravelly sand, very gravelly loamy<br>sand, very gravelly sand                                                                                                            | SM<br> <br>                                   | A-2, A-1                                     | 0-0<br>                          | NP                           |
| Tuxedni                   | 2-24<br>24-36   | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, gravelly sandy loam, sandy loam   Very gravelly loam, gravelly sandy   loam, very gravelly sandy loam, very                     | PT<br>MH, SM<br>ML, SM<br>GP-GM, SM,<br>SC-SM | A-8<br>A-5, A-2<br>A-4, A-2<br>A-1, A-2, A-4 | <br>  50-70<br>  20-35<br>  0-15 | <br> NP-5<br> NP-5<br> NP-5  |
|                           | <br>            | cobbly loamy sand                                                                                                                                                                                                   | <br>                                          |                                              | <br>                             |                              |
| 638:<br>Puntilla          | 6-10            | <br> Slightly decomposed plant material<br> Silt loam, very fine sandy loam<br> Very fine sandy loam, silt loam, mucky                                                                                              | <br>  PT<br>  ML<br>  MH                      | <br>  A-8<br>  A-4<br>  A-5                  | <br> <br>  30-40<br>  50-60      | <br> <br> NP-10<br> NP-10    |
|                           | 36-60           | silt loam<br> Loam, silt loam, gravelly loam, sandy loam                                                                                                                                                            | GM, CL-ML, SM                                 | A-4, A-2                                     | 20-25                            | NP-5                         |
| 639:                      |                 |                                                                                                                                                                                                                     |                                               |                                              | !<br>!                           |                              |
| Puntilla                  | 0-6             | Slightly decomposed plant material                                                                                                                                                                                  | PT                                            | A-8                                          |                                  | <br> NID 10                  |
|                           |                 | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam, mucky<br>  silt loam                                                                                                                           | ML<br>  MH<br>                                | A-4<br>  A-5<br>                             | 30-40<br>  50-60<br>             | NP-10<br> NP-10<br>          |
|                           | 36-60           | Silt loam, gravelly loam, sandy loam, loam                                                                                                                                                                          | GM, CL-ML, SM                                 | A-4, A-2                                     | 20-25                            | NP-5                         |

Table 8. Engineering Index Properties—Continued

| Map symbol        | <br>  Depth | USDA texture                                                             | Classification     |                                            | <br>  Liquid | <br> Plas-      |
|-------------------|-------------|--------------------------------------------------------------------------|--------------------|--------------------------------------------|--------------|-----------------|
| and soil name     |             |                                                                          | Unified            | AASHTO                                     | limit        | ticity<br>index |
|                   | ln.         |                                                                          |                    |                                            | Pct.         | <br>            |
| 640:              |             |                                                                          |                    |                                            |              |                 |
| Qutal             | - 0-3       | <br> Moderately decomposed plant material                                | <br>  PT           | <br>  A-8                                  |              |                 |
|                   | 3-10        | Very fine sandy loam, silt loam                                          | j ML               | A-4, A-5                                   | 40-50        | NP-5            |
|                   | 10-24       | Fine sandy loam, silt loam, very fine                                    | ML, SM             | A-5, A-2                                   | 40-50        | NP-5            |
|                   | <br>  24-48 | sandy loam  Sandy loam, gravelly loam, silt loam,                        | <br>  ML, SM       | <br>  A-4, A-2                             | <br>  10-35  | <br> NP-10      |
|                   | j           | loam, gravelly sandy loam                                                | j                  |                                            | j            | j               |
|                   | 48-60<br>   | Very gravelly sand, sand, gravelly   sand, loamy sand                    | GP-GM, SM, GP      | A-1                                        | 0-0<br>      | NP<br>          |
| 641.              | į           |                                                                          | į                  | į                                          | į            | į               |
| 641:<br>Qutal     | -  0-3      | <br> Moderately decomposed plant material                                | l<br>l PT          | <br>  A-8                                  |              |                 |
|                   | 3-10        | Very fine sandy loam, silt loam                                          | i ML               | A-5, A-4                                   | 40-50        | NP-5            |
|                   | 10-24       | Fine sandy loam, silt loam, very fine                                    | ML, SM             | A-2, A-5                                   | 40-50        | NP-5            |
|                   | 104.40      | sandy loam                                                               | <br>  ML CM        |                                            | 110.05       | <br> ND 10      |
|                   | 24-48       | Silt loam, sandy loam, gravelly loam,<br>  loam, gravelly sandy loam     | ML, SM             | A-4, A-2<br>                               | 10-35<br>    | NP-10           |
|                   | 48-60       |                                                                          | GP-GM, SM, GP      | A-1                                        | 0-0          | NP              |
|                   |             | loamy sand, sand                                                         |                    |                                            |              |                 |
| 642:              | 1           |                                                                          |                    |                                            |              |                 |
| Qutal             | - 0-3       | Moderately decomposed plant material                                     | PT                 | A-8                                        | į            | ļ               |
|                   | 3-10        | Very fine sandy loam, silt loam                                          | ML                 | A-5, A-4                                   | 40-50        | NP-5            |
|                   | 10-24       | Fine sandy loam, silt loam, very fine<br>  sandy loam                    | ML, SM             | A-5, A-2<br>                               | 40-50<br>    | NP-5<br>        |
|                   | 24-48       | Sandy loam, gravelly loam, silt loam,                                    | ML, SM             | A-4, A-2                                   | 10-35        | NP-10           |
|                   | į           | loam, gravelly sandy loam                                                | <u> </u>           | į .                                        | į            | į <u>.</u>      |
|                   | 48-60       | Sand, very gravelly sand, loamy sand,<br>  gravelly sand                 | GP-GM, SM, GP      | A-1                                        | 0-0          | NP              |
| 643:              | i           |                                                                          |                    |                                            | i            | i               |
| Redoubt, terraces | -  0-2      | Mucky peat                                                               | j PT               | А-8                                        | j            | j               |
|                   | 2-22        | Silt loam, mucky silt loam, very fine                                    | MH, SM             | A-5                                        | 50-70        | NP-5            |
|                   | <br>  22-60 | sandy loam   Gravelly sandy loam, sandy loam, loam,                      | <br> SC-SM, SM, CL | <br>A-4 A-2                                | <br>  20-30  | <br> NP-10      |
|                   |             | gravelly loam, gravelly silt loam                                        |                    |                                            |              | "               |
| 644:              |             |                                                                          |                    |                                            |              |                 |
| Redoubt           | - 0-2       | Mucky peat                                                               | PT                 | A-8                                        | i            | i               |
|                   | 2-22        | Silt loam, mucky silt loam, very fine                                    | MH, SM             | A-5                                        | 50-70        | NP-5            |
|                   | 22-60       | sandy loam   Loam, gravelly sandy                                        | <br> SC-SM, SM, CL | Δ-4 Δ-2                                    | <br>  20-30  | <br> NP-10      |
|                   | 22 00       | loam, sandy loam, gravelly silt loam                                     |                    |                                            | 20 00        |                 |
| 645:              |             |                                                                          |                    |                                            |              |                 |
| Redoubt           | - 0-2       | Mucky peat                                                               | PT                 | A-8                                        | i            |                 |
|                   | 2-22        | Mucky silt loam, very fine sandy loam,                                   | MH, SM             | A-5                                        | 50-70        | NP-5            |
|                   |             | silt loam   Gravelly sandy loam, sandy loam,                             | <br> SC-SM, SM, CL | \<br>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 20-30        | <br> NP-10      |
|                   | 22-00       | gravelly silt loam, gravelly loam, loam                                  |                    |                                            | 20-30        |                 |
| 646:              |             |                                                                          |                    |                                            |              |                 |
| Redoubt, cool     | - 0-2       | l<br> Mucky peat                                                         | PT                 | <br>  A-8                                  |              |                 |
|                   | 2-22        | Silt loam, mucky silt loam, very fine                                    | MH, SM             | A-5                                        | 50-70        | NP-5            |
|                   |             | sandy loam                                                               | <br> CC CM CM CL   | 1 1 1 1 1                                  |              | <br> ND 10      |
|                   | 22-60       | Gravelly sandy loam, sandy loam, loam, gravelly loam, gravelly silt loam | SC-SM, SM, CL      | A-4, A-2                                   | 20-30        | NP-10           |
|                   |             |                                                                          | i                  | i                                          | i            | 1               |

Table 8. Engineering Index Properties—Continued

| Map symbol                     | <br>  Depth                            | USDA texture                                                                                                                                                                                                        | Classification                                        |                                              | <br>  Liquid                         | <br> Plas-                  |
|--------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------|--------------------------------------|-----------------------------|
| and soil name                  |                                        |                                                                                                                                                                                                                     | Unified                                               | <br>  AASHTO                                 | limit<br> <br>                       | ticity<br>index             |
|                                | ln.                                    |                                                                                                                                                                                                                     |                                                       |                                              | Pct.                                 | ļ                           |
| 647: Redoubt, moderately steep | <br>  0-2<br>  2-22                    | <br> <br> Mucky peat<br> Silt loam, very fine sandy loam, mucky                                                                                                                                                     | <br> <br>  PT<br>  MH, SM                             | <br>  A-8<br>  A-5                           | <br> <br> <br>  50-70                | <br> <br> NP-5              |
|                                | 22-60                                  | silt loam<br> Gravelly silt loam, loam, gravelly<br>  loam, sandy loam, gravelly sandy loam                                                                                                                         | <br> SC-SM, SM, CL <br>                               | <br>A-4, A-2<br>                             | <br> 20-30<br>                       | <br> NP-10<br>              |
| Redoubt, gently sloping        | <br>  0-2<br>-  2-22                   | <br> Mucky peat<br> Very fine sandy loam, silt loam, mucky<br>  silt loam                                                                                                                                           | PT<br>MH, SM                                          | <br>  A-8<br>  A-5                           | <br> <br>  50-70                     | <br> <br> NP-5              |
|                                | 22-60                                  | Loam, gravelly sandy loam, gravelly   loam, gravelly silt loam, sandy loam                                                                                                                                          | SC-SM, SM, CL                                         | A-4, A-2                                     | 20-30                                | <br> NP-10<br>              |
| 648:                           |                                        |                                                                                                                                                                                                                     |                                                       |                                              |                                      |                             |
| Redoubt, cool                  | -  0-2<br>  2-22<br>                   | Mucky peat<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                                                                                                                                | PT<br>  MH, SM<br>                                    | A-8<br>  A-5<br>                             | <br>  50-70<br>                      | <br> NP-5<br>               |
|                                | 22-60                                  | Sandy loam, gravelly sandy loam, loam, gravelly loam, gravelly silt loam                                                                                                                                            | SC-SM, SM, CL                                         | Á-4, A-2                                     | 20-30                                | NP-10<br>                   |
| Tuxedni                        | 2-24                                   | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, gravelly sandy loam, sandy loam   Gravelly sandy loam, very gravelly   sandy loam, very cobbly loamy sand,   very gravelly loam | PT<br>  MH, SM<br>  ML, SM<br>  GP-GM, SM,<br>  SC-SM | A-8<br>A-5, A-2<br>A-4, A-2<br>A-1, A-2, A-4 | <br>  50-70<br>  20-35<br>  0-15<br> | <br> NP-5<br> NP-5<br> NP-5 |
| 649:<br>Riverwash              | <br> <br>                              | <br>                                                                                                                                                                                                                | <br> <br>                                             |                                              | <br> <br>                            |                             |
| 650:                           |                                        |                                                                                                                                                                                                                     |                                                       |                                              |                                      |                             |
| Salamatof                      | 0-4                                    | <br> Peat<br> Woody peat                                                                                                                                                                                            | PT<br>PT                                              | A-8<br>  A-8                                 | <br> <br>                            |                             |
| Doroshin                       |                                        | <br> Mucky peat<br> Silt loam, very fine sandy loam                                                                                                                                                                 | <br>  PT<br>  MH                                      | <br>  A-8<br>  A-5                           | <br> <br>  50-70                     | <br> <br> NP-5              |
| 651:<br>Salamatof              |                                        | <br> Peat<br> Woody peat                                                                                                                                                                                            | <br>  PT<br>  PT                                      | <br>  A-8<br>  A-8                           | <br> <br>                            | <br> <br>                   |
| 652:<br>Slikok                 | <br> -  0-13<br>  13-51<br>  51-60<br> | <br> Peat<br> Mucky silt loam, silt loam<br> Fine sandy loam, silt loam, very<br>  gravelly sandy loam, gravelly silt<br>  loam, gravelly fine sandy loam                                                           | <br>  PT<br> ML, OH, OL<br>  GM, ML<br>               | A-8<br>  A-4, A-5<br>  A-2, A-4              | <br> <br>  40-60<br>  10-35<br>      | <br> <br> NP-5<br> NP-5<br> |
| 653:<br>Slikok                 |                                        | <br> Peat<br> Mucky silt loam, silt loam<br> Very gravelly sandy loam, gravelly silt<br>  loam, gravelly fine sandy loam, silt<br>  loam, fine sandy loam                                                           | <br>  PT<br>  ML, OH, OL<br>  GM, ML<br> <br>         | <br>  A-8<br>  A-4, A-5<br>  A-4, A-2        | <br> <br> 40-60<br> 10-35<br>        | <br> <br> NP-5<br> NP-5     |

Table 8. Engineering Index Properties—Continued

| Map symbol    | <br>  Depth          | USDA texture                                                                                                           | Classification              |                        | <br>  Liquid       | <br> Plas-        |
|---------------|----------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|--------------------|-------------------|
| and soil name | <br> <br>            | <br>                                                                                                                   | Unified                     | AASHTO                 | limit<br> <br>     | ticity<br>index   |
|               | In.                  |                                                                                                                        |                             |                        | Pct.               | ļ                 |
| 654:          | <br>                 |                                                                                                                        |                             |                        |                    | 1                 |
| Smithfha      | 0-3<br>3-4           | Moderately decomposed plant material<br> Silt loam, very fine sandy loam, loamy<br>  very fine sand                    | PT<br>SM, ML                | A-8<br>A-4, A-1        | <br>  0-0          | <br>  NP<br>      |
|               | 4-18                 | Very fine sandy loam, loamy very fine   sand, silt loam, sandy loam                                                    | ML, SM                      | A-4, A-1               | 0-0                | NP                |
|               | <br>  18-60          | Sand, fine sand, loamy very fine sand                                                                                  | SM                          | A-4, A-2               | 0-0                | NP                |
| 655:          | <br>                 |                                                                                                                        |                             |                        |                    |                   |
| Smithfha      |                      | Moderately decomposed plant material                                                                                   | PT SM MI                    | A-8                    | j                  | j<br>i NP         |
|               | 3-4<br>              | Loamy very fine sand, very fine sandy   loam, silt loam                                                                | SM, ML<br>                  | A-4, A-1<br>           | 0-0<br>            | NP                |
|               | 4-18<br>             | Loamy very fine sand, very fine sandy<br>  loam, silt loam, sandy loam                                                 | ML, SM                      | A-4, A-1               | 0-0                | NP                |
|               | 18-60                | Loamy very fine sand, fine sand, sand                                                                                  | SM                          | A-4, A-2               | 0-0                | NP                |
| 656:          |                      |                                                                                                                        |                             |                        |                    |                   |
| Smokey Bay    | 0-2<br>  2-9         | Highly decomposed plant material  Silt loam, very fine sandy loam                                                      | PT<br>  ML, SM              | A-8<br>  A-4           | <br>  25-35        | <br> NP-10        |
|               | 9-55                 | Stratified silt loam to fine sandy                                                                                     | ML, SM                      | A-4, A-2               | 25-35              | NP-10             |
|               | <br>  55-60<br>      | loam, gravelly fine sandy loam<br>Fine sandy loam, loam, silt loam,<br>gravelly fine sandy loam                        | <br>  ML, SM<br>            | <br>  A-4, A-2<br>     | <br>  15-35<br>    | <br> NP-10<br>    |
| 657:          |                      |                                                                                                                        |                             |                        |                    |                   |
| Smokey Bay    | 0-2                  | <br> Highly decomposed plant material                                                                                  | PT                          | <br>  A-8              |                    |                   |
|               | 2-9<br>  9-55        | Silt loam, very fine sandy loam<br> Gravelly fine sandy loam, stratified                                               | ML, SM<br>  ML, SM          | A-4<br>  A-4, A-2      | 25-35<br>  25-35   | NP-10<br> NP-10   |
|               | j                    | silt loam to fine sandy loam                                                                                           | j                           | j                      | j                  | j                 |
|               | 55-60<br>            | Gravelly fine sandy loam, fine sandy<br>  loam, silt loam, loam                                                        | ML, SM<br>                  | A-4, A-2<br>           | 15-35<br>          | NP-10<br>         |
| 658:          | <br>                 |                                                                                                                        |                             |                        |                    | 1                 |
| Snowdance     | 0-3<br>3-8           | Slightly decomposed plant material  Silt loam, mucky silt loam, very fine   sandy loam                                 | PT<br>MH, ML                | A-8<br>A-5, A-4        | <br>  40-60        | <br> NP-5         |
|               | 8-24                 | Gravelly silt loam, cobbly silt loam,                                                                                  | MH, ML, SM                  | A-5, A-4               | 40-60              | NP-5              |
|               | <br>  24-60<br>      | silt loam Very gravelly sandy loam, very cobbly sandy loam, very gravelly fine sandy loam                              | GM, SC-SM, SM               | A-1, A-2, A-4          | 0-15               | <br> NP-5<br>     |
| 659:          | <br>                 |                                                                                                                        |                             |                        | <br>               |                   |
| Soldotna      | 0-4                  | Moderately decomposed plant material                                                                                   | PT                          | A-8                    |                    |                   |
|               | 4-7<br>  7-22        | Silt loam, very fine sandy loam<br> Very fine sandy loam, silt loam                                                    | MH, ML, SM<br>  MH, ML, SM  | A-5, A-4<br>  A-5, A-4 | 40-60<br>  40-60   | NP-5<br> NP-5     |
|               | 22-29                | Gravelly silt loam, very fine sandy                                                                                    | MĹ, GM                      | A-4, A-1               | 30-40              | NP-5              |
|               | <br>  29-60<br> <br> | loam, silt loam<br> Stratified very gravelly sand to silt loam,<br>  very gravelly loamy sand, very<br>  gravelly sand | <br> GP, SM, SP-SM<br> <br> | A-1, A-2<br>           | <br>  0-0<br> <br> | <br>  NP<br> <br> |
| 660:          |                      |                                                                                                                        |                             |                        |                    | İ                 |
| Soldotna      | <br>  0-4            | <br> Moderately decomposed plant material                                                                              | <br>  PT                    | <br>  A-8              | <br>               |                   |
|               | 4-7                  | Very fine sandy loam, silt loam                                                                                        | MH, ML, SM                  | A-5, A-4               | 40-60              | NP-5              |
|               | 7-22<br>  22-29      | Very fine sandy loam, silt loam<br> Silt loam, gravelly silt loam, very                                                | MH, ML, SM<br>  ML, GM      | A-5, A-4<br>  A-4, A-1 | 40-60<br>  30-40   | NP-5<br> NP-5     |
|               | j<br>l 29-60         | fine sandy loam Stratified very gravelly sand to silt                                                                  | <br> GP, SM, SP-SM          | <br>  A-1, A-2         | <br>  0-0          | j<br>I NP         |
|               | <u> </u>             | loam, very gravelly sand, very<br>  gravelly loamy sand                                                                |                             | 71,72                  |                    |                   |

Table 8. Engineering Index Properties—Continued

| Map symbol                            | <br>  Depth                  | USDA texture                                                                                                                                                                                                                                                    | Classification                                                                 |                                                                        | <br>_   Liquid                                       | <br> Plas-                                    |
|---------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------|
| and soil name                         | <br> <br>                    |                                                                                                                                                                                                                                                                 | Unified                                                                        | <br>  AASHTO<br>                                                       | limit<br> <br>                                       | ticity<br>index                               |
|                                       | In.                          |                                                                                                                                                                                                                                                                 |                                                                                |                                                                        | Pct.                                                 | ļ                                             |
| 661:<br>Soldotna                      | 4-7<br>  7-22                | <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Silt loam, gravelly silt loam, very<br>  fine sandy loam                                                                                  | <br>  PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM                           | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1                    | <br> <br> 40-60<br> 40-60<br> 30-40                  | <br> <br> NP-5<br> NP-5<br> NP-5              |
|                                       | 29-60<br> <br>               | Very gravelly sand, stratified very<br>  gravelly sand to silt loam, very<br>  gravelly loamy sand                                                                                                                                                              | GP, SM, SP-SM<br> <br> <br>                                                    | A-1, A-2<br> <br>                                                      | 0-0<br> <br>                                         | NP<br> <br> <br>                              |
| 662:<br>Soldotna                      | 4-7<br>  7-22                | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Gravelly silt loam, very fine sandy   loam, silt loam   Very gravelly loamy sand, very gravelly   sand, stratified very gravelly sand to   silt loam | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM<br> <br> GP, SM, SP-SM          | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1<br>A-1, A-2                    | <br>  40-60<br>  40-60<br>  30-40<br>  0-0           | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| 663:<br>Soldotna, sandy<br>substratum | 4-7<br>  7-22<br>  22-29<br> |                                                                                                                                                                                                                                                                 | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM<br>  SP-SM, SM,<br>  SW-SM      | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br>  A-1, A-2      | <br>  40-60<br>  40-60<br>  30-40<br>  0-0           | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| 664:<br>Soldotna, sandy<br>substratum | 4-7<br>  7-22<br>  22-29<br> | <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, gravelly silt<br>  loam, silt loam<br> Fine sand, gravelly loamy sand, sand                                         | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM<br>  SP-SM, SM,<br>  SW-SM      | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br>  A-1, A-2      | <br> <br>  40-60<br>  40-60<br>  30-40<br> <br>  0-0 | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| 665:<br>Soldotna, sandy<br>substratum | 7-22<br>  22-29<br>          |                                                                                                                                                                                                                                                                 | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM<br> <br>  SP-SM, SM,<br>  SW-SM | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br> <br>  A-1, A-2 | <br> <br>  40-60<br>  40-60<br>  30-40<br> <br>  0-0 | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| 666:<br>Soldotna, sandy<br>substratum | 4-7<br>  7-22<br>  22-29<br> | Moderately decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Very fine sandy loam, gravelly silt   loam, silt loam   Fine sand, gravelly loamy sand, sand                                                         | PT   MH, ML, SM   MH, ML, SM   ML, GM   SP-SM, SM,   SW-SM                     | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1<br>A-1, A-2                    | <br>  40-60<br>  40-60<br>  30-40<br>  0-0           | <br> <br> NP-5<br> NP-5<br> NP-5<br>          |

Table 8. Engineering Index Properties—Continued

| Map symbol                 | <br>  Depth                        | USDA texture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Classification                                 |                                         | <br> Liquid                       | <br> Plas-                  |
|----------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------|-----------------------------------|-----------------------------|
| and soil name              |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <br>  Unified<br>                              | <br>  AASHTO<br>                        | limit<br> <br>                    | ticity<br>index             |
|                            | ln.                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                         | Pct.                              |                             |
| 667:                       |                                    | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                | <br>                                    |                                   |                             |
| Soldotna, strongly sloping | 0-4<br>-  4-7<br>  7-22<br>  22-29 | Moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam,   Silt loam, very fine sandy loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loam,   Silt loa | PT<br>  MH, ML, SM<br>  MH, ML, SM<br>  ML, GM | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1 | <br>  40-60<br>  40-60<br>  30-40 | <br> NP-5<br> NP-5<br> NP-5 |
|                            | 29-60                              | gravelly silt loam Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <br> GP, SM, SP-SM<br> <br>                    | <br>  A-1, A-2<br> <br>                 | <br>  0-0<br>                     | NP                          |
| Soldotna, gently           | 0-4                                | <br> Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PT                                             | <br>  A-8                               |                                   |                             |
| sloping                    | 4-7                                | Silt loam, very fine sandy loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML, SM                                     | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 7-22<br>  22-29                    | Very fine sandy loam, silt loam<br> Very fine sandy loam, gravelly silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | MH, ML, SM<br>  GM, ML                         | A-5, A-4<br>  A-4, A-1                  | 40-60<br>  30-40                  | NP-5<br> NP-5               |
|                            | 22-29                              | loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | GIVI, IVIL                                     | A-4, A-1<br>                            | 30-40                             | -5                          |
|                            | 29-60                              | Very gravelly sand, stratified very gravelly   sand to silt loam, very gravelly loamy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | GP, SM, SP-SM                                  | A-1, A-2                                | 0-0                               | NP                          |
| 668:                       |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                | <br>                                    |                                   |                             |
| Soldotna, sandy            | 0-4                                | Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PT                                             | A-8                                     |                                   | ļ                           |
| substratum                 | -  4-7                             | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML, SM                                     | A-5, A-4                                | 40-60<br>  40-60                  | NP-5                        |
|                            | 7-22<br>  22-29                    | Very fine sandy loam, silt loam<br> Very fine sandy loam, gravelly silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | MH, ML, SM<br>  ML, GM                         | A-5, A-4<br>  A-4, A-1                  | 30-40                             | NP-5                        |
|                            |                                    | loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ,                                              |                                         |                                   |                             |
|                            | 29-60                              | Fine sand, gravelly loamy sand, sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SP-SM, SM,                                     | A-1, A-2                                | 0-0                               | NP                          |
| 668:                       |                                    | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                | <br>                                    | <br>                              |                             |
| Kenai                      | 0-2                                | Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | j PT                                           | A-8                                     | j                                 | j                           |
|                            | 2-6                                | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML                                         | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 6-19<br>  19-24                    | Silt loam, very fine sandy loam<br> Very fine sandy loam, loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MH, ML<br>  ML, SM                             | A-5, A-4<br>  A-4                       | 40-60<br>  25-35                  | NP-5                        |
|                            | 25-60                              | Silty clay loam, silt loam, gravelly loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CL                                             | A-6, A-4                                | 30-40                             | 10-30                       |
| 669:                       |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                | <br>                                    |                                   |                             |
| Soldotna, sandy            | 0-4                                | <br> Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PT                                             | A-8                                     |                                   |                             |
| substratum                 |                                    | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML, SM                                     | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 7-22                               | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML, SM                                     | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 22-29                              | Very fine sandy loam, gravelly silt<br>  loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ML, GM<br>                                     | A-4, A-1<br>                            | 30-40<br>                         | NP-5<br>                    |
|                            | 29-60                              | Fine sand, gravelly loamy sand, sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SP-SM, SM,                                     | A-1, A-2                                | 0-0                               | NP                          |
| Kenai                      | <br>-  0-2                         | <br> Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <br>  PT                                       | <br>  A-8                               | <br>                              |                             |
|                            | 2-6                                | Silt loam, very fine sandy loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML                                         | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 6-19                               | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML                                         | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 19-24<br>  25-60                   | Very fine sandy loam, loam, silt loam<br> Gravelly loam, silt loam, silty clay loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ML, SM<br>  CL                                 | A-4<br>  A-6, A-4                       | 25-35<br>  30-40                  | NP-5<br> 10-30              |
| 670:                       |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                         |                                   |                             |
| 670:<br>Soldotna           | 0-4                                | <br> Moderately decomposed plant material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PT                                             | A-8                                     |                                   |                             |
|                            | 4-7                                | Very fine sandy loam, silt loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SM, MH, ML                                     | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 7-22                               | Silt loam, very fine sandy loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MH, ML, SM                                     | A-5, A-4                                | 40-60                             | NP-5                        |
|                            | 22-29                              | Silt loam, gravelly silt loam, very<br>  fine sandy loam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ML, GM                                         | A-4, A-1<br>                            | 30-40<br>                         | NP-5                        |
|                            | 29-60                              | Very gravelly sand, stratified very gravelly   sand to silt loam, very gravelly loamy sand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <br> SM, SP-SM, GP<br>                         | A-1, A-2                                | 0-0                               | NP                          |

Table 8. Engineering Index Properties—Continued

| Map symbol       | <br>  Depth                                             | USDA texture                                                                                                                                                                                                                                                                                  | Classification                                                                |                                                             | <br>  Liquid                                         | <br> Plas-                                    |
|------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------|
| and soil name    | <br> <br>                                               |                                                                                                                                                                                                                                                                                               | Unified                                                                       | AASHTO                                                      | limit                                                | ticity<br>index                               |
| 670:<br>Kichatna | 11-14<br>                                               | Slightly decomposed plant material   Slit loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sandy loam, very gravelly   loamy coarse sand   Very gravelly loamy sand, very gravelly   sand, extremely gravelly coarse sand,   extremely gravelly loamy coarse sand | <br>  PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM | A-8<br>A-4, A-5<br>A-5, A-4<br>A-1<br>A-1                   | Pct.     40-60   40-60   0-15   0-0                  | <br> <br> NP-5<br> NP-5<br> NP-5<br>  NP      |
| 671:<br>Soldotna | 4-7<br>  7-22<br>  22-29                                | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Very fine sandy loam, gravelly silt   loam, silt loam   Very gravelly loamy sand, very gravelly   sand, stratified very gravelly sand to   silt loam                               | <br>  PT<br>  MH, SM, ML<br>  MH, ML, SM<br>  ML, GM<br> <br> GP, SM, SP-SM   | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-1<br>A-1, A-2         | <br> <br>  40-60<br>  40-60<br>  30-40<br> <br>  0-0 | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| Kichatna         | 11-14<br>                                               | Slightly decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sandy loam, very gravelly   loamy coarse sand   Extremely gravelly loamy coarse sand,   extremely gravelly coarse sand, very   gravelly sand, very gravelly loamy sand | PT<br>  ML, MH<br>  MH, ML<br>  GM, SC-SM,<br>  GW-GM<br> GM, GP, GP-GM       | A-8<br>A-4, A-5<br>A-5, A-4<br>A-1<br>A-1                   | <br>  40-60<br>  40-60<br>  0-15<br> <br>  0-0       | <br> <br> NP-5<br> NP-5<br> NP-5<br> <br>  NP |
| 672:<br>Soldotna | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br> <br>  29-60 | Moderately decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Gravelly silt loam, very fine sandy   loam, silt loam   Very gravelly sand, stratified very gravelly   sand to silt loam, very gravelly loamy sand                                 | <br>  PT<br> SM, MH, ML<br> SM, MH, ML<br>  ML, GM<br> <br> GP, SM, SP-SM     | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-1<br>  A-1, A-2 | <br>  40-60<br>  40-60<br>  30-40<br>  0-0           | <br> <br> NP-5<br> NP-5<br> NP-5<br>          |
| Nikolai          |                                                         | Peat  Muck  Gravelly fine sandy loam, gravelly silt loam,   gravelly very fine sandy loam, fine sandy   loam, silt loam, very fine sandy loam  Very gravelly loamy sand, very gravelly   sand, loamy sand, sand, gravelly sand,   gravelly loamy sand                                         | PT<br>  PT<br>  MH, ML, SM<br> <br>  SM                                       | A-8<br>A-8<br>A-2, A-5<br>A-2, A-1                          | <br> <br>  0-60<br> <br>  0-0                        | <br> <br> <br> NP-5<br> <br> <br>  NP         |
| 673:<br>Spenard  | 14-25                                                   | <br> Peat, mucky peat<br> Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Silt loam, gravelly loam, loam,<br>  gravelly silty clay loam                                                                                                                               | PT<br>  ML<br>  ML<br>  ML<br> ML, GC, SC-SM                                  | A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-7               | <br> <br>  40-50<br>  40-50<br>  25-45               | <br> <br> NP-5<br> NP-5<br>  5-15             |
| 674:<br>Spenard  | 14-25                                                   | <br> Mucky peat, peat<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loam, gravelly loam, gravelly silty<br>  clay loam, silt loam                                                                                                                               | <br>  PT<br>  ML<br>  ML<br> ML, GC, SC-SM                                    | A-8<br>A-5, A-4<br>A-5, A-4<br>A-4, A-7                     | <br> <br>  40-50<br>  40-50<br>  25-45<br>           | <br> <br> NP-5<br> NP-5<br>  5-15             |

Table 8. Engineering Index Properties—Continued

| Map symbol                   | <br>  Depth                                | USDA texture                                                                                                                                                                                                                                                                                                       | Classification                                            |                                                     | <br>  Liquid                               | <br> Plas-                        |
|------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|--------------------------------------------|-----------------------------------|
| and soil name                | <br> <br>                                  |                                                                                                                                                                                                                                                                                                                    | Unified                                                   | <br>  AASHTO<br>                                    | limit<br>                                  | ticity<br>index                   |
|                              | ln.                                        |                                                                                                                                                                                                                                                                                                                    |                                                           |                                                     | Pct.                                       |                                   |
| 675:<br>Spenard              | 9-14<br>  14-25                            | Mucky peat, peat<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loam, silt loam, gravelly silty clay<br>  loam, gravelly loam                                                                                                                                                         | <br>  PT<br>  ML<br>  ML<br> ML, GC, SC-SM                | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-7 | <br>  40-50<br>  40-50<br>  25-45          | <br> NP-5<br> NP-5<br>  5-15      |
| 676:<br>Starichkof           | 0-7<br>  7-60                              | <br> Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                 | PT<br>PT                                                  | <br>  A-8<br>  A-8                                  |                                            |                                   |
| Doroshin                     | <br>  0-36<br>  36-60                      | <br> Mucky peat<br> Silt loam, very fine sandy loam                                                                                                                                                                                                                                                                | <br>  PT<br>  MH                                          | <br>  A-8<br>  A-5                                  | <br> <br>  50-70                           | <br> <br> NP-5                    |
| 677:                         |                                            |                                                                                                                                                                                                                                                                                                                    |                                                           |                                                     | į                                          |                                   |
| Starichkof                   | 0-7<br>  7-60<br>                          | Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                      | PT<br>  PT<br>                                            | A-8<br>  A-8<br>                                    | <br> <br>                                  | <br> <br>                         |
| 678:<br>Starichkof           | <br>   0-7<br>  7-60                       | <br> Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                 | <br> <br>  PT<br>  PT                                     | <br>  A-8<br>  A-8<br>                              | <br> <br>                                  | <br> <br>                         |
| 679:<br>Starichkof, forested | <br>   0-7<br>  7-60                       | Peat  <br> Stratified mucky peat to silt loam to  <br>  ashy sand                                                                                                                                                                                                                                                  | <br> <br>  PT<br>  PT                                     | <br> <br>  A-8<br>  A-8                             | <br> <br>                                  | <br> <br>                         |
| 680:<br>Starichkof           | <br> <br>  0-7<br>  7-60                   | <br> Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                 | <br> <br>  PT<br>  PT                                     | <br> <br>  A-8<br>  A-8                             | <br> <br>                                  | <br> <br>                         |
| Slikok                       | <br>   0-13<br>  13-51<br>  51-60          | Peat  Silt loam, mucky silt loam  Silt loam, very gravelly sandy loam,   gravelly silt loam, gravelly fine   sandy loam, fine sandy loam                                                                                                                                                                           | <br>  PT<br>  ML, OH, OL<br>  GM, ML<br>                  | <br>  A-8<br>  A-4, A-5<br>  A-4, A-2<br>           | <br> <br>  40-60<br>  10-35<br>            | <br> <br> NP-5<br> NP-5<br>       |
| Naptowne                     | 0-3<br>  3-14<br>  13-20<br>  20-60        | Slightly decomposed plant material,   moderately decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Gravelly very fine sandy loam, very cobbly   silt loam, very gravelly sandy loam, very   gravelly fine sandy loam, very gravelly   silt loam, gravelly loamy sand | PT<br> <br>  MH, ML, SM<br>  ML, SM<br> GW-GM, GM, SM<br> | <br>  A-8<br>  A-5, A-4<br>  A-4<br>  A-4, A-1      | <br> <br>  40-60<br>  20-30<br>  0-30<br>  | <br> <br> NP-5<br> NP-5<br> NP-5  |
| 681:<br>Starichkof           | <br>   0-7<br>  7-60                       | <br> Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                                                                                                                                                 | <br> <br>  PT<br>  PT                                     | <br> <br>  A-8<br>  A-8                             | <br> <br>                                  | <br> <br>                         |
| Spenard                      | <br>   0-9<br>  9-14<br>  14-25<br>  25-60 | Peat, mucky peat Very fine sandy loam, silt loam Silt loam, very fine sandy loam Loam, silt loam, gravelly loam, gravelly silty clay loam                                                                                                                                                                          | PT ML ML ML, GC, SC-SM                                    | <br>  A-8<br>  A-5, A-4<br>  A-5, A-4<br>  A-4, A-7 | <br> <br>  40-50<br>  40-50<br>  25-45<br> | <br> <br> NP-5<br> NP-5<br>  5-15 |

Table 8. Engineering Index Properties—Continued

| Map symbol           | <br>  Depth                                  | USDA texture                                                                                                                                                                           | Classification                                                 |                                           | <br>  Liquid                            | <br> Plas-                       |  |
|----------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------|-----------------------------------------|----------------------------------|--|
| and soil name        |                                              |                                                                                                                                                                                        | Unified                                                        | AASHTO                                    | limit                                   | ticity<br>index                  |  |
|                      | ln.                                          |                                                                                                                                                                                        |                                                                |                                           | Pct.                                    | -                                |  |
| 682:                 | <br>                                         |                                                                                                                                                                                        |                                                                |                                           |                                         |                                  |  |
| Susitna              | 0-2<br>2-3<br>3-45<br>45-60                  | Moderately decomposed plant material   Fine sandy loam, silt loam   Stratified fine sand to silt loam   Extremely gravelly coarse sand, very   gravelly sand, very gravelly loamy sand | PT<br>  ML<br>  SM, CL, ML<br>  GP, GM                         | A-8<br>A-4<br>A-2, A-4<br>A-1             | <br>  25-35<br>  5-30<br>  0-0          | <br> NP-10<br> NP-10<br>  NP     |  |
| Riverwash            | <br> <br>                                    | <br> <br>                                                                                                                                                                              |                                                                |                                           |                                         | <br>                             |  |
| 683:                 |                                              |                                                                                                                                                                                        |                                                                |                                           | i                                       |                                  |  |
| Susitna              | 2-3<br>3-45                                  | Moderately decomposed plant material   Fine sandy loam, silt loam   Stratified fine sand to silt loam   Very gravelly loamy sand, extremely   gravelly coarse sand, very gravelly sand | PT<br>  ML<br>  SM, CL, ML<br>  GP, GM                         | A-8<br>A-4<br>A-2, A-4<br>A-1             | <br>  25-35<br>  5-30<br>  0-0          | <br> NP-10<br> NP-10<br>  NP     |  |
| 684:                 |                                              |                                                                                                                                                                                        |                                                                |                                           | 1                                       |                                  |  |
| Talkeetna            | 0-2<br>2-7                                   | Slightly decomposed plant material  Silt loam, mucky silt loam, very fine   sandy loam                                                                                                 | PT  <br>  MH, ML                                               | A-8<br>A-5, A-4                           | 40-60                                   | <br> NP-5                        |  |
|                      | 7-19                                         | Mucky very fine sandy loam, loam, mucky                                                                                                                                                | ML, MH                                                         | A-5, A-4                                  | 40-60                                   | NP-5                             |  |
|                      | 19-60                                        | silt loam, silt loam  Very gravelly fine sandy loam, very cobbly   sandy loam, very gravelly sandy loam                                                                                | GM, GW-GM,<br>GC-GM                                            | A-1, A-2                                  | 0-15                                    | <br> NP-5<br>                    |  |
| 685:                 |                                              | [<br>[                                                                                                                                                                                 |                                                                |                                           |                                         |                                  |  |
| Talkeetna            | 0-2<br>2-7                                   | Slightly decomposed plant material Very fine sandy loam, mucky silt loam, silt loam                                                                                                    | PT<br>  MH, ML<br>                                             | A-8<br>A-5, A-4                           | 40-60                                   | <br> NP-5                        |  |
|                      | 7-19                                         | Mucky silt loam, loam, mucky very fine   sandy loam, silt loam                                                                                                                         | ML, MH                                                         | A-5, A-4                                  | 40-60                                   | NP-5                             |  |
|                      | 19-60                                        | Very gravelly sandy loam, very cobbly   sandy loam, very gravelly fine sandy loam                                                                                                      | GM, GW-GM,                                                     | A-1, A-2                                  | 0-15                                    | NP-5                             |  |
| 686:                 |                                              |                                                                                                                                                                                        |                                                                |                                           |                                         |                                  |  |
| Talkeetna            | 0-2<br>2-7                                   | Slightly decomposed plant material Very fine sandy loam, mucky silt loam, silt loam                                                                                                    | PT<br>  MH, ML                                                 | A-8<br>A-5, A-4                           | 40-60                                   | <br> NP-5                        |  |
|                      | 7-19                                         | Mucky very fine sandy loam, loam, mucky   silt loam, silt loam                                                                                                                         | ML, MH                                                         | A-5, A-4                                  | 40-60                                   | NP-5                             |  |
|                      | 19-60                                        | Very gravelly sandy loam, very cobbly   sandy loam, very gravelly fine sandy loam                                                                                                      | GM, GW-GM,                                                     | A-1, A-2                                  | 0-15                                    | <br> NP-5<br>                    |  |
| Starichkof           | 0-7<br>  7-60                                | Peat<br> Stratified mucky peat to silt loam to<br>  ashy sand                                                                                                                          | <br>  PT<br>  PT                                               | A-8<br>A-8                                |                                         |                                  |  |
| 687:                 | <br>                                         |                                                                                                                                                                                        |                                                                |                                           |                                         |                                  |  |
| Tangerra             | 0-4<br>  4-8<br>  8-16<br>  16-46<br>  46-60 | Moderately decomposed plant material  Very fine sandy loam, silt loam  Silt loam, sandy loam, loam  Gravelly sand, sand, loamy sand  Very gravelly sand, very gravelly loamy   sand    | PT<br>  ML, OL<br>  CL-ML, SM<br>  SM, SW-SM<br> GW-GM, SM, GW | A-8<br>A-4<br>A-4, A-2<br>A-2, A-1<br>A-1 | <br>  25-40<br>  5-15<br>  0-0<br>  0-0 | <br> 0-5<br> 2-5<br>  NP<br>  NP |  |
| 688:                 | <br>                                         |                                                                                                                                                                                        | <u> </u>                                                       |                                           |                                         |                                  |  |
| Beaches, tidal flats |                                              |                                                                                                                                                                                        |                                                                |                                           |                                         |                                  |  |

Table 8. Engineering Index Properties—Continued

| Map symbol        | <br>  Depth | USDA texture                                                                                                                            | Classification                      |                                           | <br>  Liquid               | <br> Plas-              |
|-------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|----------------------------|-------------------------|
| and soil name     |             |                                                                                                                                         | Unified                             | <br>  AASHTO                              | Imit                       | ticity<br>index         |
|                   | In.         |                                                                                                                                         |                                     |                                           | Pct.                       |                         |
| 689:<br>Tlikakila | 1-19        | <br> Moderately decomposed plant material<br> Silt loam, very fine sandy loam<br> Gravelly sandy loam, sandy loam, fine<br>  sandy loam | <br>  PT<br>  MH, SM<br>  SC-SM, SM | <br>  A-8<br>  A-5, A-4<br> A-1, A-2, A-4 | <br> <br>  40-65<br>  0-15 | <br> <br> NP-5<br> NP-5 |
|                   | 34-60       | Gravelly loamy sand, very gravelly sand                                                                                                 | GP, SM, SP-SM                       | A-1, A-2                                  | 0-0                        | NP                      |
| 690:<br>Tlikakila |             | <br> <br> Moderately decomposed plant material<br> Very fine sandy loam, silt loam                                                      | <br> <br>  PT<br>  MH, SM           | <br> <br>  A-8<br>  A-5, A-4              | <br> <br> <br>  40-65      | <br> <br> NP-5          |
|                   | 19-34<br>   | Fine sandy loam, sandy loam, gravelly<br>sandy loam<br>Very gravelly sand, gravelly loamy sand                                          | SC-SM, SM<br> <br> SM, GP, SP-SM    | A-1, A-2, A-4<br> <br>  A-1, A-2          | 0-15<br> <br>  0-0         | NP-5<br> <br>  NP       |
| 691:              |             |                                                                                                                                         | <br>                                |                                           | <br>                       |                         |
| Tlikakila         | 1-19        | Moderately decomposed plant material  Silt loam, very fine sandy loam  Sandy loam, fine sandy loam, gravelly   sandy loam               | PT<br>SM, MH<br>SC-SM, SM           | A-8<br>A-5, A-4<br>A-1, A-2, A-4          | <br>  40-65<br>  0-15      | <br> NP-5<br> NP-5      |
|                   | 34-60       | Very gravelly sand, gravelly loamy sand                                                                                                 | GP, SM, SP-SM                       | A-1, A-2                                  | 0-0                        | NP                      |
| 692:<br>Tokositna | 1 -         | <br> <br> Slightly decomposed plant material<br> Mucky silt loam, silt loam, very fine                                                  | <br> <br>  PT<br>  MH, ML           | <br> <br>  A-8<br>  A-5, A-4              | <br> <br> <br>  40-60      | <br> <br> NP-5          |
|                   |             | sandy loam Silt loam, very fine sandy loam, sandy loam Very cobbly loam, very cobbly sandy loam, very gravelly loam                     | <br>  MH, ML<br> SC-SM, GM, SM      | <br>  A-5, A-4<br> A-1, A-2, A-4          | <br>  40-60<br>  0-15      | <br> NP-5<br> NP-5      |
| 693:<br>Tokositna |             | <br>                                                                                                                                    | <br>  PT<br>  ML, MH                | <br>  A-8<br>  A-5, A-4                   | <br> <br> <br>  40-60      | <br> <br> NP-5          |
|                   |             | sandy loam<br> Silt loam, very fine sandy loam, sandy loam<br> Very cobbly sandy loam, very cobbly<br>  loam, very gravelly loam        | <br>  MH, ML<br> GM, SM, SC-SM<br>  | <br>  A-5, A-4<br> A-1, A-2, A-4<br>      | <br>  40-60<br>  0-15<br>  | <br> NP-5<br> NP-5<br>  |
| 694:              |             | <br>                                                                                                                                    | <br>                                |                                           | <br>                       |                         |
| Tokositna         |             | Slightly decomposed plant material  Mucky silt loam, silt loam, very fine   sandy loam                                                  | PT<br>  MH, ML<br>                  | A-8<br>  A-5, A-4<br>                     | <br>  40-60<br>            | <br> NP-5<br>           |
|                   |             | Silt loam, very fine sandy loam, sandy loam<br> Very cobbly sandy loam, very cobbly<br>  loam, very gravelly loam                       | MH, ML<br> SM, GM, SC-SM<br>        | A-5, A-4<br> A-1, A-2, A-4<br>            | 40-60<br>  0-15<br>        | NP-5<br> NP-5<br>       |
| 695:              |             | <br>                                                                                                                                    |                                     |                                           | <br>                       |                         |
| Truuli            |             | Mucky peat, peat, muck<br> Mucky silt loam, silt loam, very fine<br>  sandy loam                                                        | PT<br>  MH, ML<br>                  | A-8<br>  A-5, A-4<br>                     | <br>  40-65<br>            | <br> NP-5<br>           |
|                   |             | Fine sandy loam, silt loam<br> Sandy loam, gravelly sandy loam, loamy<br>  sand                                                         | ML<br>SC-SM, SM                     | A-4<br>  A-4, A-1<br>                     | 25-35<br>0-15              | NP-5<br> NP-5<br>       |
| 696:<br>Tutka     | 0-7         | <br> <br> Moderately decomposed plant material                                                                                          | <br> <br>  PT                       | <br> <br>  A-8                            | <br> <br>                  |                         |
|                   |             | Very fine sandy loam, silt loam, mucky                                                                                                  | ML, SM, MH                          | A-5, A-4                                  | <br>  40-60<br>            | NP-5                    |
|                   | 13-21       | Sili todin<br> Gravelly mucky silt loam, gravelly<br>  mucky very fine sandy loam, very<br>  gravelly mucky silt loam                   | <br>  GM, GP-GM<br> <br>            | <br>  A-1, A-5<br>                        | <br>  40-60<br> <br>       | <br> NP-5<br>           |
|                   | 21-60       | Bedrock                                                                                                                                 | İ                                   |                                           |                            |                         |

Table 8. Engineering Index Properties—Continued

| Map symbol       | <br>  Depth                             | USDA texture                                                                                                                                                                                                                    | Classification                                            |                                                       | <br>  Liquid                         | <br> Plas-                      |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------|--------------------------------------|---------------------------------|
| and soil name    |                                         |                                                                                                                                                                                                                                 | Unified                                                   | AASHTO                                                | limit<br> <br>                       | ticity<br>index                 |
|                  | ln.                                     |                                                                                                                                                                                                                                 |                                                           |                                                       | Pct.                                 |                                 |
| 696:             | 1                                       |                                                                                                                                                                                                                                 | i                                                         |                                                       | <br>                                 |                                 |
| Kasitsna         | 0-3<br>3-18                             | Moderately decomposed plant material<br> Mucky silt loam, very fine sandy loam,<br>  gravelly very fine sandy loam, silt loam                                                                                                   | PT<br>MH, GM                                              | A-8<br>  A-5, A-1                                     | <br>  50-70                          | <br> NP-5                       |
|                  | 18-31                                   | Loam, sandy loam, gravelly sandy loam,<br>  very gravelly sandy loam                                                                                                                                                            | GM, SC-SM, ML                                             | A-1, A-4                                              | 5-30                                 | NP-10                           |
|                  | 31-60                                   | Very gravelly sandy loam, very cobbly   sandy loam, very gravelly loam                                                                                                                                                          | GM, GC-GM                                                 | A-1, A-2<br>                                          | <br>  5-30<br>                       | NP-10                           |
| Rock outcrop     | -                                       | <br> <br>                                                                                                                                                                                                                       |                                                           |                                                       | <br>                                 |                                 |
| 697:             |                                         |                                                                                                                                                                                                                                 | İ                                                         |                                                       | <u> </u>                             |                                 |
| Tutka            | -  0-7<br>  7-13                        | Moderately decomposed plant material<br> Silt loam, mucky silt loam, very fine<br>  sandy loam                                                                                                                                  | PT<br>  ML, SM, MH<br>                                    | A-8<br>  A-5, A-4<br>                                 | <br>  40-60<br>                      | <br> NP-5<br>                   |
|                  | 13-21                                   | Gravelly mucky very fine sandy loam,<br>  gravelly mucky silt loam, very<br>  gravelly mucky silt loam                                                                                                                          | GM, GP-GM                                                 | A-1, A-5                                              | 40-60                                | NP-5                            |
|                  | 21-60                                   | Bedrock                                                                                                                                                                                                                         |                                                           |                                                       | <br>                                 |                                 |
| Portgraham       | 0-2                                     | <br> Slightly decomposed plant material                                                                                                                                                                                         | <br>  PT                                                  | <br>  A-8                                             | <br>                                 |                                 |
|                  | 2-4                                     | Very fine sandy loam, silt loam<br> Silt loam, mucky very fine sandy loam,                                                                                                                                                      | MH, ML                                                    | A-5, A-4                                              | 40-60<br>40-60                       | NP-5                            |
|                  | 27-60                                   | gravelly silt loam, mucky silt loam   Bedrock                                                                                                                                                                                   | SM, MH, ML<br> <br>                                       | A-5, A-1<br> <br>                                     | 40-60<br> <br>                       |                                 |
| 698:             |                                         |                                                                                                                                                                                                                                 | <br>                                                      | <br>                                                  | <br>                                 |                                 |
| Tuxedni          | -  0-2<br>  2-24                        | Moderately decomposed plant material<br> Silt loam, very fine sandy loam                                                                                                                                                        | PT<br>MH, SM                                              | A-8<br>A-5, A-2                                       | <br>  50-70                          | <br> NP-5                       |
|                  | 24-36<br>  36-60<br>                    | Silt loam, gravelly sandy loam, sandy loam<br>  Gravelly sandy loam, very gravelly<br>  sandy loam, very cobbly loamy sand,<br>  very gravelly loam                                                                             | ML, SM<br>  MP-GM, SM,<br>  SC-SM                         | A-4, A-2<br>  A-1, A-2, A-4<br>                       | 20-35                                | NP-5<br> NP-5<br> NP-5          |
| 699:             |                                         |                                                                                                                                                                                                                                 | <br>                                                      |                                                       | <br>                                 |                                 |
| Tuxedni          | 0-2<br>  2-24<br>  24-36<br>  36-60<br> | Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, gravelly sandy loam, sandy loam<br> Gravelly sandy loam, very gravelly<br>  sandy loam, very cobbly loamy sand,<br>  very gravelly loam | PT<br>  MH, SM<br>  ML, SM<br>  GP-GM, SM,<br>  SC-SM<br> | A-8<br>  A-5, A-2<br>  A-4, A-2<br> A-1, A-2, A-4<br> | <br>  50-70<br>  20-35<br>  0-15<br> | <br> NP-5<br> NP-5<br> NP-5<br> |
| 700:             | j                                       | Madagatah, dagaman and plant material                                                                                                                                                                                           | į<br>I DT                                                 | 1 40                                                  | į                                    | į                               |
| Tuxedni, warm    | 0-2<br>  2-24<br>  24-36<br>  36-60<br> | Moderately decomposed plant material<br> Very fine sandy loam, silt loam<br> Silt loam, gravelly sandy loam, sandy loam<br> Gravelly sandy loam, very gravelly<br>  sandy loam, very gravelly loam, very<br>  cobbly loamy sand | PT<br>  MH, SM<br>  ML, SM<br>  GP-GM, SM,<br>  SC-SM     | A-8<br>  A-5, A-2<br>  A-4, A-2<br> A-1, A-2, A-4<br> | <br>  50-70<br>  20-35<br>  0-15<br> | <br> NP-5<br> NP-5<br> NP-5<br> |
| 701:             |                                         | <br>                                                                                                                                                                                                                            | <br> <br>                                                 |                                                       |                                      |                                 |
| Typic Cryaquents | 0-2<br>  2-6<br>                        | Slightly decomposed plant material<br> Very fine sandy loam, silt loam, silty<br>  clay loam                                                                                                                                    | PT<br>  ML, SM<br>                                        | A-8<br>  A-4<br>                                      | <br>  25-35<br>                      | <br> NP-10<br>                  |
|                  | 6-60<br> <br>                           | Gravelly sandy loam, very gravelly<br>  sandy loam, very cobbly loamy sand,<br>  very gravelly sand, silt loam, very<br>  gravelly loamy sand                                                                                   | GP, CL-ML,<br>  SP-SM<br>                                 | A-1, A-4<br> <br>                                     | <br>  0-15<br> <br> <br>             | NP-5<br> <br>                   |

Table 8. Engineering Index Properties—Continued

| Map symbol                  | <br>  Depth                      | USDA texture                                                                                                                                                                                                       | Classification                       |                                       | <br>  Liquid                   | <br> Plas-              |
|-----------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|--------------------------------|-------------------------|
| and soil name               |                                  |                                                                                                                                                                                                                    |                                      | <br>  AASHTO                          | Liquid<br>  limit<br>          | ticity<br>index         |
|                             | ln.                              |                                                                                                                                                                                                                    |                                      |                                       | Pct.                           | <u> </u>                |
| 702:<br>Typic Cryopsamments | <br> <br>-  0-60                 | <br> <br> Loamy sand, sand, loamy fine sand                                                                                                                                                                        | <br> <br>  SM                        | <br> <br>  A-2                        | <br> <br>  0-0                 | <br> <br>  NP           |
| 703:<br>Typic Cryorthents   | <br> <br>-  0-1                  | <br> <br> Slightly decomposed plant material, gravelly                                                                                                                                                             | <br> <br>  PT                        | <br> <br>  A-8                        | <br> <br>                      |                         |
|                             | <br>  1-33                       | slightly decomposed plant material<br> Very fine sandy loam, gravelly very                                                                                                                                         | CL, SM                               | <br> A-2, A-1, A-6                    | <br>  25-40                    | <br>INP-25              |
|                             | 33-60                            | fine sandy loam, silty clay loam<br> Very fine sandy loam, very gravelly<br>  silt loam, cobbly silty clay loam                                                                                                    | CL, GM                               | <br> A-1, A-4, A-6<br>                | j                              | <br> NP-25<br>          |
| 704:<br>Urban land          | -                                | <br>                                                                                                                                                                                                               | <br> <br>                            | <br> <br>                             | <br> <br>                      |                         |
| 705:<br>Water, fresh        | -                                | <br>                                                                                                                                                                                                               | <br>                                 |                                       | <br> <br> <br>                 |                         |
| 706:<br>Whitsol             | <br> -  0-3<br>  3-29<br>  29-51 | <br> Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Gravelly fine sandy loam, stratified silt<br>  loam to fine sand, loam, sandy loam, very<br>  fine sandy loam, gravelly sandy loam | <br>  PT<br>  MH, ML<br>  SM, ML<br> | <br>  A-8<br>  A-5, A-4<br>  A-4, A-1 | <br> <br>  40-60<br>  5-30<br> | <br> <br> NP-5<br> NP-5 |
|                             | 51-60<br> <br>                   |                                                                                                                                                                                                                    | GW, GM, SP-SM<br> <br> <br>          | A-1<br> <br>                          | 0-0<br> <br>                   | NP<br> <br> <br>        |
| 707:<br>Whitsol             | <br> -  0-3                      | <br>                                                                                                                                                                                                               | i<br>I PT                            | <br>  A-8                             | İ                              | j<br>                   |
| WIIIISOI                    | 3-29<br>  29-51                  | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Gravelly fine sandy loam, gravelly sandy<br>  loam, loam, stratified silt loam to fine                                                  | FI<br>  MH, ML<br>  SM, ML<br>       | A-6<br>  A-5, A-4<br>  A-4, A-1       | <br>  40-60<br>  5-30<br>      | NP-5<br> NP-5<br> NP-5  |
|                             | <br>  51-60<br> <br>             | sand, sandy loam, very fine sandy loam  Extremely gravelly sand, very gravelly   loamy sand, very gravelly coarse sand,   gravelly sand                                                                            | <br> GW, GM, SP-SM<br> <br>          | <br>  A-1<br>                         | <br>  0-0<br> <br>             | <br>  NP<br> <br> <br>  |
| 708:                        |                                  |                                                                                                                                                                                                                    |                                      |                                       |                                |                         |
| Whitsol                     | 3-29                             | Slightly decomposed plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, loam, gravelly sandy<br>  loam, gravelly fine sandy loam, stratified<br>  silt loam to fine sand, sandy loam      | PT<br>  MH, ML<br>  SM, ML<br>       | A-8<br>  A-5, A-4<br>  A-4, A-1       | <br>  40-60<br>  5-30<br>      | <br> NP-5<br> NP-5<br>  |
|                             | 51-60                            |                                                                                                                                                                                                                    | <br> GW, GM, SP-SM<br> <br>          | <br>  A-1<br>                         | <br>  0-0<br> <br>             | <br>  NP<br> <br>       |
| 709:<br>Whitsol             | <br> -  0-3<br>  3-29<br>  29-51 | <br> Slightly decomposed plant material<br> Silt loam, very fine sandy loam<br> Gravelly fine sandy loam, gravelly sandy<br>  loam, loam, stratified silt loam to fine sand,<br>  sandy loam, very fine sandy loam | <br>  PT<br>  MH, ML<br>  SM, ML     | <br>  A-8<br>  A-5, A-4<br>  A-4, A-1 | <br> <br>  40-60<br>  5-30     | <br> <br> NP-5<br> NP-5 |
|                             | <br>  51-60<br> <br>             | sandy loarn, very line sandy loarn<br> Gravelly sand, very gravelly coarse<br>  sand, very gravelly loamy sand,<br>  extremely gravelly sand                                                                       | <br> GW, GM, SP-SM<br> <br>          | <br>  A-1<br> <br>                    | <br>  0-0<br> <br>             | <br>  NP<br> <br>       |

Table 8. Engineering Index Properties—Continued

| Map symbol    | <br>  Depth                  | USDA texture                                                                                                                                                                                                  | Classification                 | <br>  Liquid                        | <br> Plas-                |                        |
|---------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------|---------------------------|------------------------|
| and soil name |                              |                                                                                                                                                                                                               | Unified                        | <br>  AASHTO                        | limit<br>                 | ticity<br>index        |
|               | In.                          |                                                                                                                                                                                                               |                                | <br>                                | Pct.                      | -                      |
| 710:          |                              | <br>                                                                                                                                                                                                          |                                | ]<br>                               |                           |                        |
| Whitsol       | 0-3<br>  3-29<br>  29-51<br> | Slightly decomposed plant material  Silt loam, very fine sandy loam  Loam, gravelly sandy loam, sandy loam,   stratified silt loam to fine sand, gravelly   fine sandy loam, very fine sandy loam             | PT   MH, ML   SM, ML           | A-8<br>  A-5, A-4<br>  A-4, A-1<br> | <br>  40-60<br>  5-30<br> | <br> NP-5<br> NP-5<br> |
|               | 51-60                        | Extremely gravelly sand, very gravelly coarse sand, gravelly sand, very gravelly loamy sand                                                                                                                   | GW, GM, SP-SM<br> <br>         | A-1<br> <br>                        | 0-0                       | NP<br> <br> <br>       |
| 711:          |                              | <u> </u>                                                                                                                                                                                                      |                                |                                     |                           |                        |
| Whitsol       | 0-3<br>  3-29<br>  29-51<br> | Slightly decomposed plant material<br> Silt loam, very fine sandy loam<br> Sandy loam, stratified silt loam to fine<br>  sand, gravelly fine sandy loam, gravelly<br>  sandy loam, loam, very fine sandy loam | PT<br>  MH, ML<br>  SM, ML<br> | A-8<br>  A-5, A-4<br>  A-4, A-1<br> | 40-60<br>  5-30           | <br> NP-5<br> NP-5<br> |
|               | 51-60                        | Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand                                                                                                                   | GW, GM, SP-SM                  | A-1<br> <br>                        | 0-0                       | NP                     |
| Doroshin      | 0-36<br>  36-60              | <br> Mucky peat<br> Silt loam, very fine sandy loam<br> <br>                                                                                                                                                  | PT<br>MH                       | <br>  A-8<br>  A-5<br>              | <br>  50-70<br>           | <br> <br> NP-5<br>     |

**Table 9. Engineering Sieve Data** 

(Absence of an entry indicates that the data were not estimated.)

| Map symbol and soil name         | <br>  Depth         | USDA texture                                                                                                            | Fragn<br> <br>  >10 | nents                 |                             | entage pa<br>e number       |                                |                                | <br> Sand                      | <br>  Silt                     | <br>  Clay                     |
|----------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|-----------------------------|-----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| and soil name                    |                     |                                                                                                                         | > 10<br> inches     |                       | 4                           | 10                          | 40                             | 200                            | - <br>                         |                                | <br>                           |
|                                  | <br>  In.           |                                                                                                                         | <br>  Pct.          | <br>  Pct.            | <br> <br>                   |                             |                                | -  <br>                        | Pct.                           | Pct.                           | Pct.                           |
| 501:<br>Aquic Cryofluvents       | 0-2                 | <br> <br> Slightly decomposed                                                                                           | <br>                | <br>                  | <br>                        |                             |                                |                                |                                |                                | <br>                           |
|                                  | 6-31                | plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Stratified silt loam to fine |                     | <br>  0<br>  0<br>  0 | <br>  100<br>  100<br>  100 | <br>  100<br>  100<br>  100 | <br> 85-95<br> 85-95<br> 80-95 | <br> 60-85<br> 60-85<br> 20-80 | <br> 20-50<br> 20-50<br> 20-90 | <br> 45-75<br> 45-75<br>  5-80 | <br>  0-10<br>  0-10<br>  0-10 |
|                                  | <br> 48-60<br>      | sandy loam to sand  Sand, gravelly sand,  gravelly loamy sand                                                           | <br>  0<br>         | <br>  0-15<br>        | <br> 74-92<br>              | <br> 58-87<br>              | <br> 40-60<br>                 | <br> 2-20<br>                  | <br> 80-100<br>                | <br>  0-15<br>                 | <br>  0-5<br>                  |
| 502: Aquic Cryofluvents, shallow | <br> <br> 0-2<br>   | <br> <br> Slightly decomposed<br>  plant material                                                                       | <br> <br> <br>      | <br> <br> <br>        | <br> <br> <br>              |                             |                                |                                |                                | <br>                           | <br> <br>                      |
|                                  | 2-6<br>6-19         | Very fine sandy loam, silt loam<br> Stratified silt loam to<br>  fine sandy loam to sand                                | 0<br>0              | 0                     | 100<br>  100                | 100                         | 85-95<br> 80-95                | 60-85<br>20-80                 | 20-50                          | 45-75<br>  5-80                | 0-10                           |
|                                  | <br> 19-60<br>      | Gravelly loamy sand,<br>  gravelly sand, sand                                                                           | <br>  0<br>         | <br>  0-15<br>        | <br> 74-92<br>              | <br> 58-87<br>              | <br> 40-60<br>                 | 2-20                           | <br> 80-100<br>                | 0-15                           | <br>  0-5<br>                  |
| 503:<br>Badland, sea cliffs      | <br> <br>           | <br>                                                                                                                    | <br> <br>           | <br> <br>             | <br> <br>                   |                             |                                |                                |                                |                                | <br> <br> <br>                 |
| 504:<br>Badland, sea cliffs      | <br>                |                                                                                                                         | <br>                | <br>                  | <br>                        |                             |                                |                                |                                |                                | <br>                           |
| Typic Cryorthents                | <br>  0-1<br>       | <br> Gravelly slightly decomposed<br>  plant material, slightly                                                         | <br> <br>           | <br> <br>             | <br> <br>                   | <br>                        | <br>                           |                                |                                | <br>                           | <br> <br>                      |
|                                  | <br>  1-33<br>      | decomposed plant material<br> Silty clay loam, very fine<br>  sandy loam, gravelly very<br>  fine sandy loam            | <br>  0-4<br>       | <br>  0-15<br>        | <br> 60-100<br>             | <br> 50-100<br>             | <br> 45-95<br>                 | <br> 25-85<br>                 | <br> 20-70<br>                 | <br> 30-60<br>                 | <br>  0-30<br>                 |
|                                  | <br> 33-60<br> <br> | Very fine sandy loam, very   gravelly silt loam, cobbly silty   clay loam                                               | <br>  0-4<br> <br>  | <br>  0-25<br> <br>   | <br> 60-100<br> <br>        | 50-100                      | <br> 45-95<br> <br>            | 25-80                          | 20-60                          | <br> 35-70<br> <br>            | 0-30<br> <br>                  |
| 505:<br>Beaches                  | <br> <br> <br>      | <br> <br>                                                                                                               | <br> <br> <br>      | <br> <br> <br>        | <br> <br> <br>              |                             | <br>                           |                                |                                | <br>                           | <br> <br> <br>                 |
| 506:<br>Beluga                   | <br>  0-5<br>       | <br> Moderately decomposed<br>  plant material                                                                          | <br> <br>           | <br> <br>             | <br> <br>                   | <br>                        | <br>                           | <br>                           | <br>                           | <br>                           | <br>                           |
|                                  |                     | Silt loam, very fine sandy loam<br> Silt loam, very fine sandy<br>  loam, silty clay loam, fine<br>  sandy loam         | 0<br>  0<br>  0     | 0-5<br>0-5            | 85-100<br> 85-100<br>       | 80-100<br> 80-100<br>       | 65-90<br>65-95                 | 40-80<br> 40-85<br>            | 25-60<br>20-60                 | 35-65<br> 40-75<br>            | 5-10<br>  0-30                 |
|                                  | 32-60<br> <br>      | Very fine sandy loam, clay<br>  loam, silty clay loam, silt<br>  loam, fine sandy loam                                  | 0<br> <br>          | 0-5<br> <br>          | 85-100<br> <br>             | 80-100<br> <br>             | 65-95                          | 40-90<br> <br>                 | 10-55<br> <br>                 | 30-80                          | 10-35<br> <br>                 |
| 507:<br>Beluga                   | <br> <br>  0-5<br>  | <br> <br> Moderately decomposed<br>  plant material                                                                     | <br> <br> <br>      | <br> <br> <br>        | <br> <br>                   | <br>                        |                                |                                |                                | <br>                           | <br> <br>                      |
|                                  |                     | Very fine sandy loam, silt loam<br> Fine sandy loam, silty clay<br>  loam, very fine sandy                              | 0<br>  0<br>        | 0-5<br>  0-5<br>      |                             |                             | 65-90<br> 65-95<br>            | 40-80<br> 40-85<br>            | 25-60<br>20-60                 | 35-65<br> 40-75<br>            | 5-10<br>  0-30<br>             |
|                                  | <br> 32-60<br> <br> | loam, silt loam<br> Fine sandy loam, silty clay<br> loam, clay loam, silt loam,<br>  very fine sandy loam               | <br>  0<br>         | <br>  0-5<br> <br>    | <br> 85-100<br> <br>        | <br> 80-100<br> <br>        | <br> 65-95<br> <br>            | <br> 40-90<br> <br>            | <br> 10-55<br> <br>            | <br> 30-80<br> <br>            | <br> 10-35<br> <br>            |

Table 9. Engineering Sieve Data—Continued

| Map symbol     | <br>  Depth         | USDA texture                                                                                                               | Fragn                 |                         |                            | entage pa<br>e numbei  |                          |                          | <br>  Sand               | <br>  Silt               | Clay                   |
|----------------|---------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|
| and soil name  |                     | <br>                                                                                                                       | >10<br> inches        | 3-10<br> inches         | <br>  4                    | 10                     | 40                       | 200                      | _[<br>                   |                          | <br>                   |
|                | <br>  In.           |                                                                                                                            | <br>  Pct.            | <br>  Pct.<br>          | <br> <br>                  | <br> <br>              | <br> <br>                | -  <br> <br>             | Pct.                     | <br>  Pct.               | Pct.                   |
| 508:<br>Beluga | 0-5                 | <br> <br> Moderately decomposed                                                                                            | <br>                  | <br>                    | <br>                       | <br>                   | <br>                     | <br>                     | <br>                     |                          | <br>                   |
|                | 5-7                 | plant material Very fine sandy loam,                                                                                       | <br>  0               | <br>  0-5               | <br> 85-100                | <br> 80-100            | <br> 65-90               | <br> 40-80               | <br> 25-60               | <br> 35-65               | 5-10                   |
|                | <br>  7-32          | silt loam<br> Silt loam, very fine<br>  sandy loam, silty clay                                                             | <br>  0<br>           | <br>  0-5<br>           | <br> 85-100<br>            | <br> 80-100            | <br> 65-95<br>           | <br> 40-85               | <br> 20-60               | <br> 40-75               | 0-30                   |
|                | <br> 32-60<br> <br> | loam, fine sandy loam<br> Fine sandy loam, clay loam,<br>  very fine sandy loam, silt<br>  loam, silty clay loam           | <br> <br>  0<br> <br> | <br> <br>  0-5<br> <br> | <br> <br> 85-100<br> <br>  | <br> 80-100<br>        | <br> 65-95<br> <br>      | <br> 40-90<br> <br>      | <br> 10-55<br>           | <br> 30-80<br>           | <br> 10-35<br> <br>    |
| 509:<br>Beluga | <br> <br>  0-5      | <br> <br> Moderately decomposed                                                                                            | <br> <br>             | <br> <br>               | <br> <br>                  | <br>                   |                          |                          |                          |                          | <br> <br>              |
| g              | 5-7                 | plant material<br> Very fine sandy loam, silt loam                                                                         | İ                     | <br>  0-5               | <br> <br> 85-100           | <br> 80-100            | <br> 65-90               | <br> 40-80               | <br> 25-60               | <br> 35-65               | <br>  5-10             |
|                |                     | Silt loam, very fine sandy<br>  loam, silty clay loam,<br>  fine sandy loam                                                | 0<br>  0<br>          | 0-5<br>                 |                            | 80-100<br>             | 65-95<br>                | 40-85<br>                | 20-60                    |                          | 0-30                   |
|                | 32-60<br> <br>      | Fine sandy loam, clay loam,<br>  very fine sandy loam,<br>  silt loam, silty clay loam                                     | 0<br> <br>            | 0-5<br> <br>            | <br> 85-100<br> <br>       | 80-100<br>             | 65-95<br>                | 40-90<br>                | 10-55                    | 30-80                    | 10-35                  |
| Mutnala        | 0-4                 | <br> Moderately decomposed<br>  plant material                                                                             | <br> <br>             | <br> <br>               | <br>                       |                        |                          |                          |                          |                          | <br>                   |
|                | 4-7                 | Silt loam, mucky silt<br>  loam, very fine sandy loam                                                                      | 0                     | 0                       | 100                        | 100                    | <br> 85-95               | 45-80                    | 25-65                    | 35-65                    | 0-10                   |
|                |                     | Very fine sandy loam, silt loam<br> Gravelly sandy loam, very fine<br>  sandy loam, silt loam,<br>  cobbly fine sandy loam |                       | <br>  0<br>  0-15<br>   | <br> 70-100<br> 65-95<br>  | 60-100<br> 50-90<br>   | <br> 55-95<br> 40-80<br> | 25-80<br> 20-65<br>      | 25-65<br> 30-65<br>      | 35-65<br> 30-65<br>      | <br> 0-10<br> 5-15<br> |
| 510:<br>Beluga | <br> <br>  0-5      | <br> <br> Moderately decomposed                                                                                            | <br> <br>             | <br> <br>               | <br> <br>                  | <br>                   | <br> <br>                |                          |                          | <br>                     | <br>                   |
|                |                     | plant material<br> Silt loam, very fine sandy loam<br> Silty clay loam, fine<br>  sandy loam, very fine                    | <br>  0<br>  0<br>    | <br>  0-5<br>  0-5<br>  | <br> 85-100<br> 85-100<br> | <br> 80-100<br> 80-100 | <br> 65-90<br> 65-95<br> | <br> 40-80<br> 40-85<br> | <br> 25-60<br> 20-60<br> | <br> 35-65<br> 40-75<br> | <br> 5-10<br> 0-30     |
|                | <br> 32-60<br> <br> | sandy loam, silt loam<br> Very fine sandy loam, silty clay<br>  loam, silt loam, clay<br>  loam, fine sandy loam           | <br>  0<br> <br>      | <br>  0-5<br> <br>      | <br> 85-100<br> <br>       | <br> 80-100<br> <br>   | <br> 65-95<br> <br>      | <br> 40-90<br> <br>      | <br> 10-55<br> <br>      | <br> 30-80<br> <br>      | <br> 10-35<br> <br>    |
| Smokey Bay     | 0-2                 | <br> Highly decomposed plant<br>  material                                                                                 | <br> <br>             | <br> <br>               | <br>                       |                        | <br>                     |                          |                          |                          | <br>                   |
|                | 2-9<br>  9-55<br>   | Silt loam, very fine sandy loam<br> Gravelly fine sandy loam,<br>  stratified silt loam to fine                            | <br>  0<br>  0<br>    | <br>  0<br>  0-8<br>    | <br> 80-100<br> 65-95<br>  | 75-100<br> 55-90       | 70-95<br> 50-85          | 45-80<br> 30-75          | 25-70<br> 20-55<br>      | 25-65<br> 40-75          | 5-10<br>  0-5          |
|                | <br> 55-60<br>      | sandy loam<br>Fine sandy loam, gravelly fine<br>sandy loam, loam, silt loam                                                | <br>  0<br>           | <br>  0<br>             | <br> 70-100<br>            | <br> 65-100<br>        | <br> 60-95<br>           | <br> 35-70<br>           | <br> 35-60<br>           | <br> 30-50<br>           | <br> 10-25<br>         |
| 511:<br>Beluga | <br>  0-5           | <br> <br> Moderately decomposed<br>  plant material                                                                        | <br> <br>             | <br> <br>               | <br> <br>                  |                        |                          |                          |                          |                          |                        |
|                | 5-7<br>  7-32<br>   | Silt loam, very fine sandy loam<br> Silt loam, fine sandy loam, silty<br>  clay loam, very fine sandy                      |                       | 0-5<br>0-5              |                            | 80-100<br> 80-100      | 65-90<br> 65-95<br>      | 40-80<br> 40-85<br>      | 25-60<br> 20-60<br>      | 35-65<br> 40-75          | 5-10<br>  0-30         |
|                | <br> 32-60<br> <br> | loam<br> Clay loam, silty clay loam, silt<br>  loam, very fine sandy<br>  loam, fine sandy loam                            | <br>  0<br> <br>      | <br>  0-5<br> <br>      | <br> 85-100<br> <br> <br>  | <br> 80-100<br> <br>   | <br> 65-95<br> <br>      | <br> 40-90<br> <br>      | <br> 10-55<br> <br>      | <br> 30-80<br> <br>      | <br> 10-35<br> <br>    |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | <br>  Depth        | Depth USDA texture                                                                                                                             |                   | nents<br>  3-10          |                              | Percentage passing sieve number |                           |                           | <br>  Sand                | <br>  Silt<br>            | <br>  Clay                  |
|--------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------|------------------------------|---------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|
| and son name             |                    | <br>                                                                                                                                           |                   | inches                   | 4                            | 10                              | 40                        | 200                       | -                         |                           |                             |
|                          | - <br>  In.<br>    |                                                                                                                                                | <br>  Pct.<br>    | <br>  Pct.<br>           | <br> <br>                    |                                 | <br> <br>                 | -  <br> <br>              | Pct.                      | Pct.                      | Pct.                        |
| 511:<br>Smokey Bay       | - 0-2              | <br> -<br> Highly decomposed plant                                                                                                             | <br>              | <br>                     | <br>                         |                                 | <br>                      |                           |                           |                           | <br>                        |
|                          | <br>  2-9          | material<br> Very fine sandy loam, silt loam                                                                                                   | l<br>l 0          | <br>  0                  | <br> 80-100                  | <br> 75-100                     | <br> 70-95                | <br> 45-80                | <br> 25-70                | <br> 25-65                | <br> 5-10                   |
|                          | 9-55<br> <br>      | Stratified silt loam to fine sandy loam, gravelly fine sandy loam                                                                              | 0<br> <br>        | 0-8<br> <br>             | 65-95<br> <br>               | 55-90<br> <br>                  | 50-85<br> <br>            | 30-75<br> <br>            | 20-55<br> <br>            | 40-75<br> <br>            | 0-5                         |
|                          | 55-60              | Gravelly fine sandy loam, silt<br>loam, loam, fine sandy loam                                                                                  | 0<br> <br>        | 0<br> <br>               | 70-100<br> <br>              | 65-100                          | 60-95<br> <br>            | 35-70<br> <br>            | 35-60<br> <br>            | 30-50<br> <br>            | 10-25<br> <br>              |
| 512:                     |                    |                                                                                                                                                | į                 | į                        | <u> </u>                     | į                               | į                         | į                         | į                         | į                         | į                           |
| Benka                    | -  0-3<br>         | Slightly decomposed<br>  plant material                                                                                                        | <br>              | <br>                     | <br>                         |                                 | <del></del><br>           |                           |                           |                           |                             |
|                          | 3-5                | Very fine sandy loam, silt loam                                                                                                                |                   | 0                        | 100                          | 95-100                          | 75-95                     | 51-80                     | 25-60                     | 40-65                     | 0-10                        |
|                          |                    | Silt loam, very fine sandy loam                                                                                                                | 0<br>  0          | 0<br>  0-5               | 100                          | 95-100<br> 80-100               | 75-95<br> 35-50           | 51-80                     | 25-60<br> 75-95           | 40-65                     | 0-10<br>  0-5               |
|                          |                    | Sand, loamy fine sand, loamy<br>  sand, stratified coarse sand<br>  to fine sand                                                               | 0<br> <br>        | 0-3<br> <br>             | 85-100<br> <br> <br>         |                                 |                           | 6-20<br> <br>             | /3-93<br> <br> <br>       | 5-20<br> <br>             | 0-3                         |
| 513:<br>Benka            | <br>-  0-3         | <br> <br> Slightly decomposed                                                                                                                  | <br>              | ļ<br>                    | j<br>                        | j                               | j                         | ļ                         | ļ                         | İ                         | į                           |
| Delika                   |                    | plant material                                                                                                                                 | <br>              |                          | <br>                         |                                 |                           |                           |                           |                           |                             |
|                          |                    | Very fine sandy loam, silt loam                                                                                                                |                   | 0                        | 100                          | 95-100                          | 75-95                     | 51-80                     | 25-60                     | 40-65                     | 0-10                        |
|                          | 5-30<br> 30-60<br> | Silt loam, very fine sandy loam<br> Loamy sand, loamy fine<br>  sand, sand, stratified<br>  coarse sand to fine sand                           | 0<br>  0<br> <br> | 0<br>  0-5<br> <br>      | 100<br> 85-100<br>           | 95-100<br> 80-100<br>           | 75-95<br> 35-50<br>       | 51-80<br>  6-20<br>       | 25-60<br> 75-95<br>       | 40-65<br>  5-20<br>       | 0-10<br>  0-5<br>           |
| 514:                     |                    | <br>                                                                                                                                           | !<br>             | <br>                     | <br>                         |                                 |                           |                           |                           |                           |                             |
| Benka                    | -  0-3             | Slightly decomposed<br>  plant material                                                                                                        | <br>              | <br>                     | <br>                         | ļ                               | ļ                         |                           |                           |                           |                             |
|                          | 3-5                | Very fine sandy loam, silt loam                                                                                                                | 0                 | 0                        | 100                          | 95-100                          | 75-95                     | 51-80                     | 25-60                     | 40-65                     | 0-10                        |
|                          | 5-30<br> 30-60<br> | Silt loam, very fine sandy loam<br> Loamy sand, sand, loamy<br>  fine sand, stratified<br>  coarse sand to fine sand                           | 0<br>  0<br> <br> | 0<br>  0-5<br> <br>      | 100<br> 85-100<br> <br> <br> |                                 | 75-95<br> 35-50<br> <br>  | 51-80<br>  6-20<br>       | 25-60<br> 75-95<br> <br>  | 40-65<br>  5-20<br>       | 0-10<br>  0-5<br> <br>      |
| 515:<br>Benka            | <br>-  0-3         | <br> <br> Slightly decomposed                                                                                                                  | İ                 | ļ<br>                    | <br>                         |                                 |                           | ļ                         | ļ                         | į                         | ļ<br>                       |
| Бепка                    | -  U-3<br>         | plant material                                                                                                                                 | <br>              |                          | <br>                         |                                 |                           |                           |                           |                           |                             |
|                          |                    | Very fine sandy loam, silt loam                                                                                                                |                   | 0                        | 100                          |                                 | 75-95                     | 51-80                     | 25-60                     | 40-65                     | 0-10                        |
|                          |                    | Silt loam, very fine sandy loam<br> Loamy sand, loamy fine<br>  sand, sand, stratified<br>  coarse sand to fine sand                           | 0<br>  0<br> <br> | 0<br>  0-5<br> <br>      | 100<br> 85-100<br> <br>      | 95-100<br> 80-100<br> <br>      | 75-95<br> 35-50<br> <br>  | 51-80<br>  6-20<br>       | 25-60<br> 75-95<br> <br>  | 40-65<br>  5-20<br>       | 0-10<br>  0-5<br> <br>      |
| 516:<br>Benka            | <br>-  0-3         | <br> <br> Slightly decomposed                                                                                                                  | <br>              | <br>                     | <br>                         | ļ                               | ļ                         |                           |                           | ļ                         | ļ                           |
| Denka                    |                    | plant material                                                                                                                                 | <br>              |                          | <br>                         |                                 |                           |                           |                           |                           |                             |
|                          | 3-5                | Very fine sandy loam, silt loam                                                                                                                |                   | 0                        | 100                          |                                 | 75-95                     | 51-80                     | 25-60                     | 40-65                     |                             |
|                          | 5-30<br> 30-60<br> | Silt loam, very fine sandy loam<br> Sand, loamy fine sand,<br>  loamy sand, stratified<br>  coarse sand to fine sand                           | 0<br>  0<br> <br> | 0<br>  0-5<br> <br> <br> | 100<br> 85-100<br> <br> <br> |                                 | 75-95<br> 35-50<br> <br>  | 51-80<br>  6-20<br>       | 25-60<br> 75-95<br> <br>  | 40-65<br>  5-20<br> <br>  | 0-10<br>  0-5<br> <br>      |
| 517:<br>Benka, strongly  | <br>  0-3          | <br> <br> Slightly decomposed                                                                                                                  | <br>              | i<br>i                   | i<br>i                       | j<br>                           | ļ<br>                     | ļ                         | ļ<br>                     | ļ                         | ļ<br>                       |
| sloping                  |                    | plant material                                                                                                                                 | <del>-</del>      |                          |                              |                                 |                           |                           |                           |                           |                             |
|                          | 3-5<br>  5-30      | Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Sand, loamy fine sand,   loamy sand, stratified   coarse sand to fine sand |                   | 0<br>  0<br>  0-5<br>    | 100<br>  100<br> 85-100<br>  | 95-100                          | 75-95<br> 75-95<br> 35-50 | 51-80<br> 51-80<br>  6-20 | 25-60<br> 25-60<br> 75-95 | 40-65<br> 40-65<br>  5-20 | 0-10<br>  0-10<br>  0-5<br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol                    | <br>  Depth                                 | USDA texture                                                                                                                                                                                                                                  | Fragn          |                                            |                                                | entage pa<br>e number                          |                                              |                                         | <br>  Sand                              | Silt                                    | <br>  Clay                                |
|-------------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------|------------------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-------------------------------------------|
| and soil name                 | <br> <br>                                   |                                                                                                                                                                                                                                               | >10<br> inches | 3-10<br> inches                            | 4                                              | 10                                             | 40                                           | 200                                     | - <br>                                  |                                         | <br>                                      |
|                               | <br>  In.                                   |                                                                                                                                                                                                                                               | Pct.           | Pct.                                       | <br> <br>                                      |                                                |                                              |                                         | Pct.                                    | Pct.                                    | Pct.                                      |
| 517:<br>Benka, gently sloping | <br> <br> 0-3                               | <br> Slightly decomposed                                                                                                                                                                                                                      | <br> <br>      | <br> <br>                                  | <br> <br>                                      |                                                |                                              |                                         |                                         |                                         |                                           |
|                               | 5-30                                        | plant material<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loamy fine sand, sand,<br>  loamy sand, stratified<br>  coarse sand to fine sand                                                                   |                | <br>  0<br>  0<br>  0-5<br> <br>           | <br>  100<br>  100<br> 85-100<br> <br>         | 95-100<br> 95-100<br> 80-100<br>               | <br> 75-95<br> 75-95<br> 35-50<br>           | <br> 51-80<br> 51-80<br>  6-20<br>      | <br> 25-60<br> 25-60<br> 75-95<br>      | <br> 40-65<br> 40-65<br>  5-20<br>      | <br>  0-10<br>  0-10<br>  0-5<br>         |
| 518:<br>Boxcar                | <br> <br>  0-3                              | <br> <br> Slightly decomposed                                                                                                                                                                                                                 | <br> <br>      | <br> <br>                                  | <br>                                           |                                                | <br>                                         |                                         |                                         |                                         | <br>                                      |
|                               | 5-20                                        | plant material Silt loam, very fine sandy loam Very fine sandy loam, silt loam Very cobbly fine sandy loam, very gravelly sand, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly loamy sand                             |                | <br>  0-5<br>  0-3<br>  0-40<br> <br>      | <br> 95-100<br> 90-100<br> 45-80<br> <br> <br> | <br> 90-100<br> 85-100<br> 30-75<br> <br> <br> | <br> 75-90<br> 80-95<br> 20-60<br> <br> <br> | <br> 45-80<br> 40-80<br>  5-25<br> <br> | <br> 25-60<br> 25-60<br> 75-95<br> <br> | <br> 35-70<br> 35-70<br>  5-20<br>      | <br>  0-5<br>  0-5<br>  0-5<br>  1<br>    |
| 519:<br>Boxcar                | <br> <br>  0-3                              | <br> <br> Slightly decomposed                                                                                                                                                                                                                 | <br> <br>      | <br> <br>                                  | <br> <br>                                      | <br>                                           |                                              |                                         |                                         | <br>                                    | <br>                                      |
|                               | <br>  3-5<br>  5-20                         | plant material   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Very cobbly fine sand, very   cobbly fine sandy loam, very   gravelly sand, very gravelly   loamy sand, extremely   cobbly loamy fine sand               | <br>  0-3      | <br>  0-5<br>  0-3                         | <br> 95-100<br> 90-100<br> 45-80<br> <br>      | <br> 90-100<br> 85-100<br> 30-75<br> <br>      | <br> 75-90<br> 80-95<br> 20-60<br> <br>      | <br> 45-80<br> 40-80<br>  5-25<br>      | <br> 25-60<br> 25-60<br> 75-95<br>      | <br> 35-70<br> 35-70<br>  5-20<br>      | <br>  0-5<br>  0-5<br>  0-5<br> <br> <br> |
| 520:<br>Boxcar                | <br> <br> 0-3                               | <br> <br> Slightly decomposed                                                                                                                                                                                                                 | <br> <br>      | <br> <br>                                  | <br> <br>                                      |                                                |                                              |                                         |                                         |                                         |                                           |
|                               | <br>  3-5<br>  5-20                         | plant material   Silt loam, very fine sandy loam   Very fine sandy loam, silt loam   Very cobbly fine sandy loam,   very cobbly fine sand,   extremely cobbly loamy fine   sand, very gravelly loamy   sand,very gravelly sand                | <br>  0-3      | <br>  0-5<br>  0-3                         | <br> 95-100<br> 90-100<br> 45-80<br> <br>      | <br> 90-100<br> 85-100<br> 30-75<br> <br>      | <br> 75-90<br> 80-95<br> 20-60<br> <br>      | <br> 45-80<br> 40-80<br>  5-25<br>      | <br> 25-60<br> 25-60<br> 75-95<br>      | <br> 35-70<br> 35-70<br> 5-20<br>       | <br>  0-5<br>  0-5<br>  0-5<br> <br> <br> |
| 521:<br>Boxcar, cool          | <br> <br>  0-3                              | <br> <br> Slightly decomposed                                                                                                                                                                                                                 | <br> <br>      | <br> <br>                                  | <br> <br>                                      | <br> <br>                                      | <br> <br>                                    |                                         |                                         |                                         | <br> <br>                                 |
|                               | <br>  3-5<br>  5-20                         | plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Very gravelly sand, very   cobbly fine sandy loam,   extremely cobbly loamy fine   sand, very cobbly fine sand,   very gravelly loamy sand               |                | <br>  0-5<br>  0-3<br>  0-40<br> <br>      | <br> 95-100<br> 90-100<br> 45-80<br> <br>      |                                                | <br> 75-90<br> 80-95<br> 20-60<br> <br>      | 45-80<br> 40-80<br>  5-25<br>           | 25-60<br> 25-60<br> 75-95<br>           | 35-70<br> 35-70<br> 5-20<br>            | <br>  0-5<br>  0-5<br>  0-5<br> <br> <br> |
| 522:<br>Boxcar, cool          | <br>  0-3                                   | <br> Slightly decomposed                                                                                                                                                                                                                      | <br>           | <br>                                       | <br>                                           | <br>                                           | <br>                                         |                                         |                                         |                                         |                                           |
|                               | <br>  3-5<br>  5-20<br> 20-60<br> <br> <br> | plant material<br> Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Very gravelly loamy sand,<br> very cobbly fine sand,<br> extremely cobbly loamy fine<br> sand, very gravelly sand,<br> very cobbly fine sandy loam |                | <br>  0-5<br>  0-3<br>  0-40<br> <br> <br> | <br> 95-100<br> 90-100<br> 45-80<br> <br> <br> | <br> 90-100<br> 85-100<br> 30-75<br> <br> <br> | <br> 75-90<br> 80-95<br> 20-60<br> <br>      | 45-80<br> 40-80<br>  5-25<br>           | 25-60<br> 25-60<br> 75-95<br>           | <br> 35-70<br> 35-70<br>  5-20<br> <br> | <br>  0-5<br>  0-5<br>  0-5<br> <br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol                               | <br>  Depth              | USDA texture                                                                                                                     | Fragm             |                     | Percentage passing sieve number |                           |                          |                          | <br>  Sand           | <br>  Silt          | <br>  Clay              |
|------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|---------------------------------|---------------------------|--------------------------|--------------------------|----------------------|---------------------|-------------------------|
| and soil name                            | <br> <br>                |                                                                                                                                  | >10<br> inches    | 3-10<br> inches     | <br>  4                         | 10                        | 40                       | 200                      | - <br> <br>          | <br>                | <br>                    |
|                                          | <br>  In.                | <br> <br>                                                                                                                        | Pct.              | Pct.                | <br> <br>                       |                           |                          | ·                        | Pct.                 | Pct.                | Pct.                    |
| 523:                                     |                          | <br>                                                                                                                             | <br>              | <br>                | <br>                            |                           | <br>                     | l                        |                      |                     | <br>                    |
| Chenega                                  | 0-4<br>                  | Slightly decomposed plant material                                                                                               | <br>              | <br>                | Í<br>I                          | <br>                      | <br>                     | <br>                     | j                    | j                   | <br>                    |
|                                          |                          | Very fine sandy loam, silt loam<br>Very gravelly loamy sand,<br>very gravelly sand, extremely<br>gravelly sand                   | 0<br>  0<br> <br> | 0<br>  0-11<br>     | 100<br> 40-65<br> <br>          | 100<br> 25-55<br>         | 90-98<br>  8-30<br>      | 45-80<br>  1-15<br>      | 25-70<br> 75-95<br>  | 25-65<br>  5-25<br> | 6-12<br>  0-5<br> <br>  |
| 524:                                     |                          | <br>                                                                                                                             | <br>              |                     | !<br>!                          |                           |                          |                          |                      |                     | <br>                    |
| Chenega, cool                            | 0-4<br>                  | Slightly decomposed<br>  plant material                                                                                          | <br>              | <br>                | <br>                            |                           | <br>                     |                          |                      |                     | <br>                    |
|                                          |                          | Very fine sandy loam, silt loam<br> Extremely gravelly sand, very<br>  gravelly sand, very<br>  gravelly loamy sand              | 0<br>0<br>1       | 0<br> 0-11<br>      | 100<br> 40-65<br>               | 100<br> 25-55<br>         | 90-98<br>  8-30<br>      | 45-80<br>  1-15<br>      | 25-70<br> 75-95<br>  | 25-65<br>  5-25<br> | 6-12<br>  0-5<br> <br>  |
| 525:<br>Chenega, occasionally<br>flooded | <br> <br>  0-4<br>       | <br> <br> Slightly decomposed<br>  plant material                                                                                | <br> <br>         | <br> <br>           | <br> <br> <br>                  | <br>                      | <br>                     | <br> <br>                |                      | <br>                | <br> <br>               |
|                                          |                          | Very fine sandy loam, silt loam<br>Very gravelly sand, extremely<br>gravelly sand, very<br>gravelly loamy sand                   |                   | 0<br>  0-11<br>     | 100<br> 40-65<br>               | 100<br> 25-55<br>         | 90-98<br>  8-30<br>      | 45-80<br>  1-15<br>      | 25-70<br> 75-95<br>  | 25-65<br>  5-25<br> | 2-12<br>  0-5<br> <br>  |
| 526:                                     |                          |                                                                                                                                  | <br>              | <br>                | <br>                            | !                         |                          | -                        |                      |                     |                         |
| Chulitna                                 | 0-2<br>                  | Slightly decomposed<br>  plant material, moderately<br>  decomposed plant material                                               | <br> <br>         | <br> <br>           | <br> <br>                       | <br>                      |                          |                          |                      | <br>                | <br>                    |
|                                          | 2-33                     | Silt loam, very fine sandy<br>  loam, mucky silt loam                                                                            | <br>  0<br>       | 0                   | 100                             | 100                       | 90-97                    | 55-85                    | 22-60                | 35-75               | 3-7                     |
|                                          | 33-60<br> <br> <br>      | Loamy sand, fine sand,<br>  very gravelly loamy<br>  sand, gravelly sand,<br>  gravelly loamy fine sand                          | 0<br> <br> <br>   | 0-13<br> <br>       | <br> 55-100<br> <br> <br>       | 40-100<br> <br> <br> <br> | 25-70<br> <br> <br> <br> | 4-35<br> <br> <br>       | 70-100               | 0-25                | 0-5<br> <br> <br> <br>  |
| 527:<br>Chulitna                         | <br>  0-2<br> <br>       | <br> Slightly decomposed plant<br>  material, moderately<br>  decomposed plant material                                          | <br> <br>         | <br> <br>           | <br> <br> <br>                  |                           | <br> <br>                | <br> <br>                | <br> <br>            | <br> <br>           | <br> <br> <br>          |
|                                          | <br>  2-33<br>           | <br> Silt loam, mucky silt loam,<br>  very fine sandy loam                                                                       | <br>  0<br>       | <br>  0<br>         | <br>  100<br>                   | <br>  100<br>             | <br> 90-97<br>           | <br> 55-85<br>           | <br> 22-60<br>       | <br> 35-75<br>      | <br>  3-7<br>           |
|                                          | <br> 33-60<br> <br> <br> | Gravelly sand, very<br>  gravelly loamy sand,<br>  loamy sand, gravelly<br>  loamy fine sand, fine sand                          | <br>  0<br> <br>  | <br>  0-13<br> <br> | <br> 55-100<br> <br> <br>       | <br> 40-100<br> <br> <br> | <br> 25-70<br> <br> <br> | <br>  4-35<br> <br> <br> | <br> 70-100<br> <br> | <br> 0-25<br> <br>  | <br>  0-5<br> <br> <br> |
| 528:<br>Chulitna                         | <br> <br> 0-2<br>        | <br> <br> Slightly decomposed plant<br>  material, moderately                                                                    | <br> <br>         | <br> <br>           | <br> <br> <br>                  |                           | <br> <br>                | <br> <br>                | <br> <br>            | <br>                | <br> <br>               |
|                                          | <br>  2-33               | decomposed plant material   Silt loam, very fine                                                                                 | <br>  0           | <br>  0             | <br>  100                       | 100                       | <br> 90-97               | <br> 55-85               | <br> 22-60           | 35-75               | <br>  3-7               |
|                                          | <br> 33-60<br> <br> <br> | sandy loam, mucky silt loam<br>Fine sand, gravelly<br>loamy fine sand, loamy<br>sand, very gravelly<br>loamy sand, gravelly sand | <br>  0<br> <br>  | <br>  0-13<br> <br> | <br> 55-100<br> <br> <br>       | <br> 40-100<br> <br> <br> | <br> 25-70<br> <br>      | <br>  4-35<br> <br> <br> | <br> 70-100<br> <br> | <br> 0-25<br> <br>  | <br>  0-5<br> <br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol             | Depth                         | USDA texture                                                                                                                         | Fragn                      |                               |                             | entage pa<br>e numbei         |                               |                               | <br>  Sand               | <br>  Silt                    | <br>  Clay                    |
|------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------|-------------------------------|-------------------------------|
| and soil name          |                               |                                                                                                                                      | >10<br> inches             | 3-10<br> inches               | <br>  4                     | 10                            | 40                            | 200                           | - <br>                   |                               |                               |
|                        | <br>  In.                     |                                                                                                                                      | <br>  Pct.                 | <br>  Pct.                    | <br> <br>                   | <br> <br>                     | <br> <br>                     | <br> <br>                     | Pct.                     | Pct.                          | <br>  Pct.                    |
| 529:                   |                               | <br>                                                                                                                                 | !<br>[                     | <br>                          | <br>                        |                               |                               |                               |                          |                               |                               |
| Chulitna               | 0-2<br> <br>                  | Slightly decomposed plant<br>  material, moderately<br>  decomposed plant material                                                   | <br> <br>                  | <br> <br>                     | <br> <br>                   | <br> <br>                     | <br>                          | <br>                          | <br> <br>                | <br> <br>                     | <br> <br>                     |
|                        | 2-33                          | Very fine sandy loam,<br>  silt loam, mucky silt loam                                                                                | 0                          | 0                             | 100                         | 100                           | 90-97                         | 55-85                         | 22-60                    | 35-75                         | 3-7                           |
|                        | 33-60<br> <br> <br>           | Loamy sand, very<br>  gravelly loamy sand,<br>  gravelly sand, fine sand,<br>  gravelly loamy fine sand                              | 0<br> <br> <br>            | 0-13<br> <br> <br> <br>       | 55-100<br> <br> <br>        | 40-100<br> <br> <br>          | 25-70<br> <br> <br> <br>      | 4-35<br> <br> <br>            | 70-100                   | 0-25                          | 0-5<br> <br> <br> <br>        |
| 530:                   |                               | <br>                                                                                                                                 | !<br>                      | !<br>                         | i                           | i                             | i                             | i                             | i                        |                               |                               |
| Chunilna               | 0-4                           | Moderately decomposed<br>  plant material                                                                                            | ļ                          | ļ                             | ļ                           |                               |                               |                               | ļ                        |                               |                               |
|                        | 4-8                           | Mucky silt loam, silt loam                                                                                                           | 0                          | 0                             | 100                         | 100                           | 90-95                         | 60-80                         | 25-50                    | 40-65                         | 0-10                          |
|                        |                               | Silt loam, very fine sandy loam<br> Very gravelly fine<br>  sandy loam, very<br>  gravelly sandy loam,<br>  gravelly fine sandy loam | 0<br>  0<br> <br>          | 0-10<br>  0-15<br> <br>       | 100<br> 50-70<br> <br>      | 100<br> 40-60<br> <br>        | 85-95<br> 25-45<br> <br>      | 50-80<br> 15-30<br> <br>      | 25-60<br> 55-70<br>      | 40-65<br> 20-45<br>           | 0-10<br>  0-10<br> <br> <br>  |
| 531:                   | <br>                          |                                                                                                                                      | <br>                       | <br>                          | <br>                        |                               | <br>                          | <br>                          |                          |                               |                               |
| Chunilna               | 0-4                           | Moderately decomposed<br>  plant material                                                                                            | j                          | j                             | <br>                        | ļ                             | ļ                             | ļ                             | ļ                        | ļ                             | ļ                             |
|                        | 4-8                           | Mucky silt loam, silt                                                                                                                | 0                          | 0                             | 100                         | 100                           | 90-95                         | 60-80                         | 25-50                    | 40-65                         | 0-10                          |
|                        | 8-18                          | Silt loam, very fine<br>  sandy loam                                                                                                 | 0                          | 0-10                          | 100                         | 100                           | 85-95                         | 50-80                         | 25-60                    | 40-65                         | 0-10                          |
|                        | <br> 18-60<br> <br> <br> <br> | Sandy loam<br>  Very gravelly fine<br>  sandy loam, very<br>  gravelly sandy loam,<br>  gravelly fine sandy<br>  loam                | <br>  0<br> <br> <br> <br> | <br>  0-15<br> <br> <br> <br> | <br> 50-70<br> <br> <br>    | <br> 40-60<br> <br> <br> <br> | <br> 25-45<br> <br> <br> <br> | <br> 15-30<br> <br> <br> <br> | 55-70<br> <br> <br> <br> | 20-45<br> <br> <br> <br>      | <br>  0-10<br> <br> <br> <br> |
| 532:                   |                               |                                                                                                                                      | !<br>!                     | <br>                          | <br>                        |                               |                               |                               |                          |                               | <br>                          |
| Chunilna, cool         | 0-4<br>                       | Moderately decomposed<br>  plant material                                                                                            | <br>                       | <br>                          | <br>                        | <br>                          | <br>                          | <br>                          | <br>                     | <br>                          | <br>                          |
|                        | 4-8                           | Silt loam, mucky silt loam                                                                                                           | 0                          | 0                             | 100                         | 100                           | 90-95                         | 60-80                         | 25-50                    | 40-65                         | 0-10                          |
|                        | 8-18<br> 18-60<br> <br>       | Silt loam, very fine sandy loam<br> Very gravelly fine sandy loam,<br>  gravelly fine sandy loam,<br>  very gravelly sandy loam      |                            | 0-10<br>  0-15<br> <br>       | 100<br> 50-70<br> <br>      | 100<br> 40-60<br>             | 85-95<br> 25-45<br>           | 50-80<br> 15-30<br>           | 25-60<br> 55-70<br>      | 40-65<br> 20-45<br>           | 0-10<br>  0-10<br> <br>       |
| 533:<br>Chunilna, cool | <br> <br>  0-4                | <br> <br> Moderately decomposed                                                                                                      | <br> <br>                  | <br> <br>                     | <br> <br>                   |                               | <br> <br>                     |                               |                          |                               | <br> <br>                     |
| Criurilina, cool       | 0-4                           | plant material                                                                                                                       | <br>                       | <br>                          | <br>                        |                               |                               |                               |                          |                               |                               |
|                        | 4-8                           | Mucky silt loam, silt loam                                                                                                           | 0                          | 0                             | 100                         | 100                           | 90-95                         | 60-80                         | 25-50                    | 40-65                         | 0-10                          |
|                        | 8-18<br> 18-60<br> <br> <br>  | Silt loam, very fine sandy loam<br> Gravelly fine sandy<br>  loam, very gravelly<br>  sandy loam, very<br>  gravelly fine sandy loam | 0<br>  0<br> <br> <br>     | 0-10<br>  0-15<br> <br> <br>  | 100<br> 50-70<br> <br> <br> | 100<br> 40-60<br> <br> <br>   | 85-95<br> 25-45<br> <br> <br> | 50-80<br> 15-30<br> <br> <br> | 25-60<br> 55-70<br> <br> | 40-65<br> 20-45<br> <br> <br> | 0-10<br>  0-10<br> <br> <br>  |
| 534:<br>Clam Gulch     | <br> <br>  0-3                | <br> <br> Slightly decomposed                                                                                                        | <br> <br>                  | <br> <br>                     | <br> <br>                   |                               | <br>                          | <br>                          |                          |                               | <br>                          |
| Jan Gulon-             |                               | plant material                                                                                                                       |                            |                               | İ                           |                               |                               |                               |                          |                               |                               |
|                        | 3-15<br> 15-60<br>            | Silt loam<br> Silt loam, clay loam,<br>  silty clay loam                                                                             | 0<br>  0<br>               | 0<br>  0<br>                  | 90-100<br> 90-100<br>       | 90-100<br> 85-100<br>         | 85-100<br> 85-100<br>         | 75-85<br> 75-100<br>          | 20-45<br>  5-25<br>      | 50-72<br> 45-80<br>           | 5-15<br> 15-35<br>            |
| 535:                   |                               |                                                                                                                                      | !<br>!                     | !<br>!                        | !<br>!                      |                               |                               |                               |                          | -                             |                               |
| Clunie                 |                               | Peat, woody peat<br> Silt loam, silty clay loam                                                                                      | <br>  0                    | <br>  0                       | <br>  100                   | <br>  100                     | <br> 90-99                    | <br> 70-95                    | <br>  5-45               | <br> 50-70                    | <br>  5-30                    |
|                        |                               |                                                                                                                                      |                            |                               | 100                         | 130                           |                               |                               | 5 45                     |                               |                               |

Table 9. Engineering Sieve Data—Continued

| Map symbol         | Depth                    | USDA texture                                                                                                                              | Fragn                |                             |                            | entage pa<br>e numbei      |                          |                          | <br>  Sand               | <br>  Silt               | Clay                    |
|--------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------|----------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| and soil name      |                          |                                                                                                                                           | >10<br> inches       | 3-10<br> inches             | <br>  4                    | 10                         | 40                       | 200                      | - <br>                   |                          | <br>                    |
|                    | . <br>  In.              | <br> <br>                                                                                                                                 | <br>  Pct.           | <br>  Pct.                  | <br> <br>                  | <br> <br>                  | <br> <br>                | <br> <br>                | Pct.                     | <br>  Pct.               | Pct.                    |
| 536:<br>Coal Creek | 0-6                      | <br> <br> Slightly decomposed                                                                                                             | <br> <br>            | <br> <br>                   | <br> <br>                  |                            | <br>                     |                          |                          |                          |                         |
|                    | <br>  6-15               | plant material<br> Silt loam                                                                                                              | <br>  0              | <br>  0                     | <br> 95-100                | <br> 88-100                | <br> 85-95               | <br> 50-80               | <br> 25-45               | <br> 50-65               | 0-10                    |
|                    |                          | Very fine sandy loam, silt loam<br> Very gravelly silt<br>  loam, gravelly silt loam                                                      | 0<br>  0<br>         | 0-8<br>  0-20<br>           | 90-100<br> 55-85<br>       | 85-100<br> 50-80<br>       | 70-95<br> 45-75<br>      | 45-85<br> 30-70<br>      | 20-60<br> 20-45<br>      | 40-75<br> 45-75<br>      | 0-10<br>  5-15<br>      |
| 537:               |                          |                                                                                                                                           |                      |                             |                            |                            |                          |                          |                          |                          |                         |
| Coal Creek         | ·  0-6<br>               | Slightly decomposed<br>  plant material                                                                                                   | <br>                 | <br>                        | <br>                       | <br>                       | <br>                     |                          |                          | <br>                     | <br>                    |
|                    |                          | Silt loam<br> Very fine sandy loam, silt loam                                                                                             | 0<br>  0             | 0<br>  0-8                  | 95-100<br> 90-100          | 88-100<br> 85-100          | 85-95<br> 70-95          | 50-80<br> 45-85          | 25-45<br> 20-60          | 50-65<br> 40-75          | 0-10                    |
|                    |                          | Gravelly silt loam,<br>  very gravelly silt loam                                                                                          | 0<br>  0<br>         | 0-20<br>  0-20              | 55-85<br>                  | 50-80<br>                  | 45-75<br>                | 30-70<br>                | 20-45                    | 40-75<br> 45-75<br>      | 5-15                    |
| 538:<br>Coal Creek | <br> -<br>  0-6          | ।<br> <br> Slightly decomposed                                                                                                            | <br> <br>            | <br> <br>                   | <br> <br>                  | <br>                       |                          |                          |                          |                          | <br> <br>               |
|                    | j                        | plant material                                                                                                                            | İ                    | İ                           |                            |                            |                          | j                        |                          |                          | 0.40                    |
|                    |                          | Silt loam<br> Silt loam, very fine sandy loam                                                                                             | 0<br>  0             | 0<br> 0-8                   | 95-100<br> 90-100          | 88-100<br> 85-100          | 85-95<br> 70-95          | 50-80<br> 45-85          | 25-45<br> 20-60          | 50-65<br> 40-75          | 0-10                    |
|                    | 23-60                    | Gravelly silt loam,<br>  very gravelly silt loam                                                                                          | [ 0<br>[             | 0-20<br>                    | 55-85<br>                  | 50-80<br>                  | 45-75<br>                | 30-70<br>                | 20-45                    | 45-75                    | 5-15<br>                |
| 539:<br>Cohoe      | <br> <br>  0-2           | <br> <br> Moderately decomposed                                                                                                           | <br> <br>            | <br> <br>                   | <br> <br>                  | <br> <br>                  | <br> <br>                |                          |                          |                          | <br> <br>               |
| 001100             | İ                        | plant material                                                                                                                            | İ                    | İ                           | İ                          |                            |                          | İ                        | İ                        |                          |                         |
|                    |                          | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam                                                                       |                      | 0<br> 0-8                   | 100<br> 90-100             | 100<br> 85-100             | 85-95<br> 75-95          | 55-85<br> 45-85          | 20-60<br> 20-60          | 35-75<br> 35-75          | 3-10<br>3-10            |
|                    | 52-60<br> <br> <br>      | Sandy loam, gravelly sand,<br>gravelly silt loam, gravelly<br>loam, very gravelly sandy<br>loam                                           | 0<br> <br> <br> <br> | 0-10<br> <br> <br> <br>     | 55-100<br> <br> <br> <br>  | 45-100<br> <br> <br> <br>  | 35-90<br> <br> <br> <br> | 13-70<br> <br> <br> <br> | 35-86<br> <br> <br> <br> | 14-60<br> <br> <br> <br> | 0-15<br> <br> <br> <br> |
| 540:<br>Cohoe      | <br>  0-2                | <br> <br> Moderately decomposed                                                                                                           | <br>                 | <br>                        | j<br>                      | j<br>                      | j<br>                    | j<br>                    | j<br>                    | j<br>                    | <br>                    |
|                    | <br>  2-24               | plant material<br>Very fine sandy loam, silt loam                                                                                         | j<br>  0             | <br>  0                     | <br>  100                  | <br>  100                  | <br> 85-95               | <br> 55-85               | j<br> 20-60              | <br> 35-75               | <br>  3-10              |
|                    | 24-52                    | Very fine sandy loam, silt loam                                                                                                           | j 0                  | 0-8                         | 90-100                     | 85-100                     | 75-95                    | 45-85                    | 20-60                    | 35-75                    | 3-10                    |
|                    | 52-60<br> <br> <br> <br> | Sandy loam, gravelly loam,<br>  gravelly silt loam, gravelly<br>  sand, very gravelly sandy<br>  loam                                     | 0<br> <br> <br> <br> | 0-10<br> <br> <br> <br>     | 55-100<br> <br> <br> <br>  | 45-100<br> <br> <br> <br>  | 35-90<br> <br> <br> <br> | 13-70<br> <br> <br> <br> | 35-86<br> <br> <br> <br> | 14-60<br> <br> <br> <br> | 0-15<br> <br> <br> <br> |
| 541:<br>Cohoe      | <br>-  0-2               | <br> <br> Moderately decomposed                                                                                                           | j<br>                | j<br>                       | j<br>i                     | j<br>                      | j<br>                    | j<br>                    | j<br>                    | j<br>                    | <br>                    |
|                    | İ                        | plant material<br> Very fine sandy loam, silt loam                                                                                        | į                    | į<br>į                      | <br>  100                  | 100                        | 05.05                    |                          | 100.60                   | 105.75                   | 2 10                    |
|                    |                          | Very fine sandy loam, silt loam                                                                                                           |                      | 0<br> 0-8<br>               | 90-100                     | 100<br> 85-100             | 85-95<br> 75-95          | 55-85<br> 45-85<br>      | 20-60<br> 20-60          | 35-75<br> 35-75          | 3-10<br>  3-10          |
|                    | 52-60<br> <br> <br>      | Gravelly loam, very gravelly<br>  sandy loam, sandy loam,<br>  gravelly sand, gravelly silt<br>  loam                                     | 0<br> <br> <br>      | 0-10<br> <br> <br>          | <br> 55-100<br> <br> <br>  | 45-100<br> <br> <br> <br>  | 35-90<br> <br> <br>      | 13-70<br> <br> <br>      | 35-86<br> <br> <br> <br> | 14-60<br> <br> <br>      | 0-15<br> <br> <br>      |
| 542:<br>Cohoe      | <br> <br>  0-2           | <br> <br> Moderately decomposed                                                                                                           | <br>                 | <br>                        | <br>                       |                            |                          |                          |                          |                          |                         |
|                    | <br>  2-24               | plant material<br> Very fine sandy loam, silt loam                                                                                        | <br>  0              | <br>  0                     | <br>  100                  | 100                        | <br> 85-95               | <br> 55-85               | <br> 20-60               | <br> 35-75               | <br>  3-10              |
|                    | 24-52                    | Very fine sandy loam, silt loam<br> Sandy loam, very gravelly<br>  sandy loam, gravelly sand,<br>  gravelly loam, gravelly silt<br>  loam |                      | 0-8<br>  0-10<br> <br> <br> | 90-100<br> 55-100<br> <br> | 85-100<br> 45-100<br> <br> | 75-95<br> 35-90<br>      | 45-85<br> 13-70<br>      | 20-60<br> 35-86<br>      | 35-75<br> 14-60<br>      | 3-10<br>  0-15<br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol         | Depth               | USDA texture                                                                                                                                                                    | Fragn<br> <br>  >10    | nents<br>  3-10               |                                 | entage pa<br>e numbei              |                               |                                    | <br>  Sand                    | <br>  Silt                         | <br>  Clay                        |
|--------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------|---------------------------------|------------------------------------|-------------------------------|------------------------------------|-------------------------------|------------------------------------|-----------------------------------|
| and soil name      |                     |                                                                                                                                                                                 | > 10<br> inches        |                               |                                 | 10                                 | 40                            | 200                                | - <br>                        |                                    | <br>                              |
|                    | <br>  In.           |                                                                                                                                                                                 | Pct.                   | Pct.                          | <br> <br>                       |                                    |                               | ·                                  | Pct.                          | Pct.                               | Pct.                              |
| 543:               |                     | <br>                                                                                                                                                                            | !<br>                  | !<br>                         | !<br>                           |                                    |                               |                                    |                               |                                    |                                   |
| Cohoe              | -  0-2              | Moderately decomposed<br>  plant material                                                                                                                                       |                        |                               |                                 |                                    |                               |                                    |                               |                                    |                                   |
|                    |                     | Very fine sandy loam, silt loam                                                                                                                                                 |                        | 0                             | 100                             | 100                                | 85-95                         | 55-85                              | 20-60                         | 35-75                              | 3-10                              |
|                    | 24-52<br>           | Very fine sandy loam,<br>  silt loam                                                                                                                                            | 0<br>                  | 0-8<br>                       | 90-100<br>                      | 85-100<br>                         | 75-95<br>                     | 45-85<br>                          | 20-60<br>                     | 35-75<br>                          | 3-10                              |
|                    | 52-60<br> <br> <br> | Very gravelly sandy loam,<br>  sandy loam, gravelly sand,<br>  gravelly loam,<br>  gravelly silt loam                                                                           | 0<br> <br> <br> <br>   | 0-10<br> <br> <br>            | 55-100<br> <br> <br> <br>       | 45-100<br> <br> <br> <br>          | 35-90<br> <br> <br> <br>      | 13-70<br> <br> <br> <br>           | 35-86<br> <br> <br> <br>      | 14-60<br> <br> <br> <br>           | 0-15<br> <br> <br> <br>           |
| 544:               | İ                   |                                                                                                                                                                                 | į                      | İ                             | į                               | į                                  | į                             |                                    |                               | į                                  | į                                 |
| Cohoe              | -  0-2<br>          | Moderately decomposed<br>  plant material                                                                                                                                       | <br>                   | <br>                          | <br>                            |                                    | <br>                          |                                    |                               |                                    |                                   |
|                    |                     | Very fine sandy loam, silt loam                                                                                                                                                 |                        | 0                             | 100                             | 100                                | 85-95                         | 55-85                              | 20-60                         | 35-75                              | 3-10                              |
|                    |                     | Very fine sandy loam, silt loam<br> Very gravelly sandy<br>  loam, sandy loam, gravelly<br>  loam, gravelly sand,<br>  gravelly silt loam                                       | 0<br>  0<br> <br> <br> | 0-8<br>  0-10<br> <br> <br>   | 90-100<br> 55-100<br> <br> <br> | 85-100<br> 45-100<br> <br> <br>    | 75-95<br> 35-90<br> <br> <br> | 45-85<br> 13-70<br> <br> <br>      | 20-60<br> 35-86<br> <br> <br> | 35-75<br> 14-60<br> <br> <br>      | 3-10<br>  0-15<br> <br> <br>      |
| 545:               |                     |                                                                                                                                                                                 | -                      |                               |                                 |                                    |                               |                                    |                               |                                    | ļ                                 |
| Cohoe, dry         | -  0-2<br>          | Moderately decomposed<br>  plant material                                                                                                                                       | <br>                   | <br>                          | <br>                            | <br>                               | <br>                          |                                    |                               |                                    |                                   |
|                    | 24-52               | Very fine sandy loam, silt loam<br>  Very fine sandy loam, silt loam<br>  Sandy loam, very<br>  gravelly sandy loam,<br>  gravelly sand, gravelly<br>  silt loam, gravelly loam |                        | 0<br>  0-8<br>  0-10<br> <br> | 100<br> 90-100<br> 55-100<br>   | 100<br> 85-100<br> 45-100<br> <br> | 85-95<br> 75-95<br> 35-90<br> | 55-85<br> 45-85<br> 13-70<br>      | 20-60<br> 20-60<br> 35-86<br> | 35-75<br> 35-75<br> 14-60<br>      | 3-10<br>3-10<br>0-15              |
| 546:               | <br>                | <br>                                                                                                                                                                            | <br>                   | <br>                          | <br>                            | <br>                               |                               |                                    |                               |                                    |                                   |
| Cohoe, dry         | 0-2                 | Moderately decomposed                                                                                                                                                           | ļ                      | j                             | ļ                               | ļ                                  | ļ                             | ļ                                  | ļ                             |                                    | ļ                                 |
|                    | <br>  2-24          | plant material<br> Very fine sandy loam, silt loam                                                                                                                              | <br>  0                | <br>  0                       | 100                             | 100                                | <br> 85-95                    | <br> 55-85                         | <br> 20-60                    | <br> 35-75                         | <br>  3-10                        |
|                    |                     | Very fine sandy loam, silt loam<br>Very gravelly sandy<br>loam, gravelly loam,<br>gravelly silt loam, gravelly<br>sand, sandy loam                                              | 0<br>  0<br> <br> <br> | 0-8<br>  0-10<br> <br> <br>   | 90-100<br> 55-100<br> <br> <br> | 85-100<br> 45-100<br> <br> <br>    | 75-95<br> 35-90<br> <br> <br> | 45-85<br> 13-70<br> <br> <br>      | 20-60<br> 35-86<br> <br>      | 35-75<br> 14-60<br> <br> <br>      | 3-10<br>  0-15<br> <br> <br> <br> |
| 547:<br>Cohoe, dry | <br> -  0-2         | <br> <br> Moderately decomposed                                                                                                                                                 | <br> <br>              | <br> <br>                     | <br>                            | ļ<br>                              | ļ<br>                         | ļ<br>                              | ļ<br>                         |                                    | <br>                              |
| Janes, a.,         | İ                   | plant material                                                                                                                                                                  | <u> </u>               |                               |                                 |                                    | <u> </u>                      | <u> </u>                           |                               |                                    | ļ                                 |
|                    | 24-52               | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly sand, sandy loam,<br>  very gravelly sandy loam,<br>  gravelly loam, gravelly<br>  silt loam   |                        | 0<br>  0-8<br>  0-10<br> <br> |                                 |                                    | 85-95<br> 75-95<br> 35-90<br> | 55-85<br> 45-85<br> 13-70<br> <br> | 20-60<br> 20-60<br> 35-86<br> | 35-75<br> 35-75<br> 14-60<br> <br> | 3-10                              |
| 548:<br>Cohoe, dry | <br> <br>-  0-2     | <br> <br> Moderately decomposed                                                                                                                                                 | <br> <br>              | <br> <br>                     |                                 |                                    | <br> <br>                     |                                    |                               |                                    | <br> <br>                         |
| Conoc, dry         | j                   | plant material                                                                                                                                                                  | İ                      | İ                             | <br>                            |                                    | İ                             | İ                                  | İ                             | İ                                  | İ                                 |
|                    |                     | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam                                                                                                             |                        | 0<br>  0-8                    | 100<br> 90-100                  | 100<br> 85-100                     | 85-95<br> 75-95               | 55-85<br> 45-85                    | 20-60<br> 20-60               | 35-75<br> 35-75                    | 3-10                              |
|                    |                     | Gravelly silt loam,   Gravelly silt loam,   sandy loam, very   gravelly sandy loam,   gravelly loam, gravelly sand                                                              | 0<br>  0<br> <br>      |                               | 90-100<br> 55-100<br> <br>      | 45-100<br> 45-100<br> <br>         | 75-95<br> 35-90<br> <br>      | 45-85<br> 13-70<br> <br>           | 35-86<br> <br> <br>           | 14-60<br> <br> <br>                |                                   |

Table 9. Engineering Sieve Data—Continued

| Map symbol                         | <br>  Depth              | USDA texture                                                                                                                                                                                     | Fragn                  |                                     |                                               | entage pa<br>e numbei                    |                                         |                                         | <br>  Sand                              | <br>  Silt                              | Clay                                    |
|------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| and soil name                      | <br> <br>                | <br>                                                                                                                                                                                             | >10<br> inches         | 3-10<br> inches                     | <br>  4                                       | 10                                       | 40                                      | 200                                     | - <br>                                  |                                         | <br>                                    |
|                                    | <br>  In.                |                                                                                                                                                                                                  | Pct.                   | <br>  Pct.                          | <br> <br>                                     |                                          |                                         | -  <br>                                 | Pct.                                    | Pct.                                    | Pct.                                    |
| 549:<br>Cohoe, dry                 | 0-2                      | <br> <br> Moderately decomposed                                                                                                                                                                  | <br>                   | <br> <br>                           | <br> <br>                                     |                                          | <br>                                    |                                         |                                         |                                         |                                         |
|                                    | 24-52                    | plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Sandy loam, very gravelly<br>  sandy loam, gravelly loam,<br>  gravelly silt loam, gravelly<br>  sand |                        | <br>  0<br>  0-8<br>  0-10<br> <br> | <br>  100<br> 90-100<br> 55-100<br> <br> <br> | <br>  100<br> 85-100<br> 45-100<br> <br> | <br> 85-95<br> 75-95<br> 35-90<br> <br> | <br> 55-85<br> 45-85<br> 13-70<br> <br> | <br> 20-60<br> 20-60<br> 35-86<br> <br> | <br> 35-75<br> 35-75<br> 14-60<br> <br> | <br>  3-10<br>  3-10<br>  0-15<br> <br> |
| 550:<br>Cohoe, dry                 | <br>  2-24<br> 24-52     |                                                                                                                                                                                                  |                        | <br> <br>  0<br>  0-8<br>  0-10<br> | <br> <br>  100<br> 90-100<br> 55-100<br>      | <br> <br>  100<br> 85-100<br> 45-100<br> | <br> <br> 85-95<br> 75-95<br> 35-90<br> | <br> 55-85<br> 45-85<br> 13-70          | <br> <br> 20-60<br> 20-60<br> 35-86     | <br> <br> 35-75<br> 35-75<br> 14-60<br> | <br> <br>  3-10<br> 3-10<br> 0-15<br>   |
| 551:<br>Cohoe, moderately<br>steep |                          | <br> Moderately decomposed<br>  plant material<br> Very fine sandy loam, silt loam                                                                                                               |                        | <br> <br> <br>  0<br> 0-8           | <br> <br> <br>  100<br> 90-100                | <br> <br> <br>  100<br> 85-100           | <br> <br> <br> 85-95<br> 75-95          | <br> <br> <br> 55-85<br> 45-85          |                                         | <br> <br> <br> 35-75<br> 35-75          | <br> <br> <br> 3-10<br> 3-10            |
|                                    |                          | Very fine sandy loam, silt loam<br> Sandy loam, very gravelly<br>  sandy loam, gravelly loam,<br>  gravelly silt loam, gravelly<br>  sand                                                        | 0<br>  0<br> <br> <br> |                                     | 90-100<br> 55-100<br> <br> <br>               | 45-100<br> 45-100<br> <br>               | 75-95<br> 35-90<br> <br>                | 13-70<br> <br> <br> <br>                | 20-60<br> 35-86<br> <br>                |                                         | 0-15<br> <br> <br> <br>                 |
| Cohoe, gently sloping -            | 0-2                      | <br> Moderately decomposed<br>  plant material                                                                                                                                                   | <br> <br>              | <br> <br>                           | <br>                                          |                                          |                                         |                                         |                                         |                                         |                                         |
|                                    | <br>  2-24<br>           | Very fine sandy loam,<br>  silt loam                                                                                                                                                             | 0<br>                  | 0<br>                               | 100                                           | 100                                      | 85-95                                   | 55-85<br>                               | 20-60                                   | 35-75                                   | 3-10                                    |
|                                    | İ                        | Very fine sandy loam,<br>  silt loam                                                                                                                                                             | 0<br>                  | 0-8<br>                             | İ                                             | 85-100<br>                               | 75-95<br>                               | 45-85<br>                               | 20-60<br>                               | 35-75<br>                               | 3-10<br>                                |
|                                    | 52-60<br> <br> <br> <br> | Sandy loam, very gravelly<br>  sandy loam, gravelly loam,<br>  gravelly silt loam, gravelly<br>  sand                                                                                            | 0<br> <br> <br> <br>   | 0-10<br> <br> <br> <br>             | 55-100<br> <br> <br> <br>                     | 45-100<br> <br> <br> <br>                | 35-90<br> <br> <br> <br>                | 13-70<br> <br> <br> <br>                | 35-86<br> <br> <br> <br>                | 14-60<br> <br> <br> <br>                | 0-15<br> <br> <br> <br>                 |
| 552:<br>Cohoe, dry,                | <br>  0-2                | <br> Moderately decomposed                                                                                                                                                                       | <br>                   | <br>                                | j<br>                                         | j<br>                                    | j<br>                                   | j<br>                                   | j<br>                                   | j<br>                                   | <br>                                    |
| moderately steep                   |                          | plant material<br> Very fine sandy loam,                                                                                                                                                         | <br>  0                | <br>  0                             | <br>  100                                     | 100                                      | <br> 85-95                              | <br> 55-85                              | <br> 20-60                              | <br> 35-75                              | <br>  3-10                              |
|                                    | 24-52                    | silt loam<br> Very fine sandy loam,<br>  silt loam                                                                                                                                               | 0                      | <br>  0-8                           | <br> 90-100                                   | <br> 85-100                              | <br> 75-95                              | <br> 45-85                              | 20-60                                   | <br> 35-75                              | 3-10                                    |
|                                    | <br> 52-60<br> <br> <br> | Silt loam<br> Gravelly sand, sandy loam,<br>  very gravelly sandy loam,<br>  gravelly loam, gravelly silt<br>  loam                                                                              | <br>  0<br> <br> <br>  | <br>  0-10<br> <br> <br>            | <br> 55-100<br> <br> <br>                     | <br> 45-100<br> <br> <br>                | <br> 35-90<br> <br>                     | <br> 13-70<br> <br>                     | <br> 35-86<br> <br> <br>                | <br> 14-60<br> <br> <br>                | <br>  0-15<br> <br> <br>                |
| Cohoe, dry, gently sloping         | <br>  0-2                | <br> Moderately decomposed<br>  plant material                                                                                                                                                   | <br> <br>              | <br> <br>                           | <br>                                          |                                          | <br>                                    |                                         |                                         |                                         | <br>                                    |
| Sioping                            | <br>  2-24<br>           | Very fine sandy loam,<br>  silt loam                                                                                                                                                             | <br>  0<br>            | <br>  0<br>                         | <br>  100<br>                                 | 100                                      | <br> 85-95<br>                          | <br> 55-85<br>                          | <br> 20-60<br>                          | <br> 35-75<br>                          | 3-10                                    |
|                                    | <br> 24-52<br>           | Very fine sandy loam,<br>  silt loam                                                                                                                                                             | <br> <br>              | <br>  0-8<br>                       | 90-100                                        | 85-100                                   | 75-95                                   | 45-85                                   | 20-60                                   | 35-75                                   | 3-10                                    |
|                                    | 52-60<br> <br> <br> <br> | Gravelly silt loam, gravelly<br>  sand, sandy loam, very<br>  gravelly sandy loam, gravelly<br>  loam                                                                                            | 0<br> <br> <br> <br>   | 0-10<br> <br> <br> <br>             | 55-100<br> <br> <br> <br>                     | 45-100<br> <br> <br> <br>                | 35-90<br> <br> <br>                     | 13-70                                   | 35-86<br> <br> <br>                     | 14-60<br> <br> <br> <br>                | 0-15<br> <br> <br> <br>                 |

Table 9. Engineering Sieve Data—Continued

| Map symbol         | <br>  Depth                       | USDA texture                                                                                                                                                                  | Fragn                       |                               |                                 | entage pa<br>e numbei         |                                    |                               | <br>  Sand                    | <br>  Silt                    | <br>  Clay                        |
|--------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------|---------------------------------|-------------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------------------------|
| and soil name      | <u> </u>                          |                                                                                                                                                                               | >10<br> inches              | 3-10<br> inches               | <br>  4                         | 10                            | 40                                 | 200                           | - <br>                        |                               | <br>                              |
|                    | <br>  In.<br>                     | <br> <br>                                                                                                                                                                     | <br>  Pct.<br>              | <br>  Pct.<br>                | <br> <br>                       | <br> <br>                     | <br> <br>                          |                               | <br>  Pct.<br>                | <br>  Pct.<br>                | <br>  Pct.<br>                    |
| 553:<br>Cohoe, dry | 0-2                               | <br> Moderately decomposed<br>  plant material                                                                                                                                | <br>                        | <br>                          | <br>                            | <br>                          | <br>                               |                               |                               | ļ<br>                         | <br>                              |
|                    | 2-24                              | Very fine sandy loam, silt loam                                                                                                                                               | 0                           | 0                             | 100                             | 100                           | 85-95                              | 55-85                         | 20-60                         | 35-75                         | 3-10                              |
|                    | 24-52                             | <br> Very fine sandy loam, silt loam<br>                                                                                                                                      | 0                           | 0-8                           | 90-100                          | 85-100                        | 75-95                              | <br> 45-85                    | 20-60                         | 35-75                         | 3-10                              |
|                    | <br> 52-60<br> <br> <br>          | <br> Sandy loam, very gravelly<br>  sandy loam, gravelly loam,<br>  gravelly silt loam, gravelly<br>  sand                                                                    | 0<br> <br> <br>             | <br>  0-10<br> <br> <br>      | <br> 55-100<br> <br> <br>       | 45-100<br> <br> <br>          | <br> 35-90<br> <br> <br>           | 13-70<br> <br> <br>           | 35-86<br> <br> <br>           | <br> 14-60<br> <br> <br>      | 0-15<br> <br> <br> <br>           |
| Kenai              | 0-2                               | <br> Moderately decomposed<br>  plant material                                                                                                                                |                             |                               |                                 |                               |                                    |                               |                               |                               |                                   |
|                    | <br>  2-6                         | Silt loam, very fine sandy loam                                                                                                                                               | 0                           | I<br>I 0                      | 1 100                           | 100                           | <br> 80-95                         | <br> 50-80                    | <br> 25-60                    | <br> 35-65                    | <br>  5-10                        |
|                    | 6-19                              | Very fine sandy loam, silt loam                                                                                                                                               |                             | 0                             | 100                             | 100                           | 80-95                              | 50-80                         | 25-60                         | 35-65                         | 5-10                              |
|                    | 19-24                             | Silt loam, loam, very                                                                                                                                                         | 0                           | 0                             | 90-100                          | 85-100                        | 75-97                              | 40-85                         | 20-70                         | 25-75                         | 3-10                              |
|                    | <br> 25-60<br>                    | fine sandy loam<br> Gravelly loam, silt<br>  loam, silty clay loam                                                                                                            | <br>  0<br>                 | <br>  0<br>                   | <br> 85-100<br>                 | <br> 80-100<br>               | <br> 75-99<br>                     | <br> 50-95<br>                | <br>  5-45<br>                | <br> 35-75<br>                | <br> 20-35<br>                    |
| 554:               |                                   | <u> </u>                                                                                                                                                                      | <br>                        | <br>                          | <br>                            | <br>                          |                                    |                               | ļ                             |                               |                                   |
| Cohoe, dry         | 0-2                               | Moderately decomposed<br>  plant material                                                                                                                                     |                             |                               |                                 |                               |                                    |                               |                               |                               |                                   |
|                    | 2-24                              | Very fine sandy loam,<br>  silt loam                                                                                                                                          | <br>  0<br>                 | <br>  0<br>                   | <br>  100<br>                   | 100                           | <br> 85-95<br>                     | <br> 55-85<br>                | <br> 20-60<br>                | <br> 35-75<br>                | 3-10                              |
|                    |                                   | Very fine sandy loam, silt loam<br>Gravelly silt loam,<br>gravelly loam, very<br>gravelly sandy loam,<br>sandy loam, gravelly<br>sand                                         | 0<br>  0<br> <br> <br> <br> |                               | 90-100<br> 55-100<br> <br> <br> |                               | 75-95<br> 35-90<br> <br> <br>      | 45-85<br> 13-70<br>           | 20-60<br> 35-86<br>           | 35-75<br> 14-60<br> <br> <br> | 3-10<br>  0-15<br> <br> <br>      |
| Kenai              | 0-2                               | <br> Moderately decomposed                                                                                                                                                    | j<br>                       | j<br>                         | j<br>i                          | ļ<br>                         | <br>                               | ļ<br>                         | i<br>i                        | ļ                             | ļ<br>                             |
|                    | İ                                 | plant material                                                                                                                                                                |                             |                               | İ                               | j                             | İ                                  | j                             | İ                             | İ                             | İ                                 |
|                    |                                   | Silt loam, very fine sandy loam                                                                                                                                               |                             | 0                             | 100                             | 100                           | 80-95                              | 50-80                         | 25-60                         | 35-65                         | 5-10                              |
|                    |                                   | Silt loam, very fine sandy loam  Loam, silt loam, very                                                                                                                        | 0<br>  0                    | 0<br>  0                      | 100                             | 100<br> 85-100                | 80-95<br> 75-97                    | 50-80<br> 40-85               | 25-60                         | 35-65<br> 25-75               | 5-10                              |
|                    | 19-24                             | fine sandy loam                                                                                                                                                               | 0                           | U                             | 90-100                          |                               | /3-9/                              | <del>4</del> 0-65<br>         | 20-70<br>                     | 20-75                         | 3-10<br>                          |
|                    | 25-60                             | Gravelly loam, silt<br>  loam, silty clay loam                                                                                                                                | 0<br>                       | 0<br>                         | 85-100                          | 80-100                        | 75-99                              | 50-95                         | 5-45                          | 35-75                         | 20-35                             |
| 555:<br>Cohoe, dry | 0-2                               | <br> <br> Moderately decomposed                                                                                                                                               | <br> <br>                   | <br> <br>                     | <br>                            | <br>                          |                                    |                               |                               |                               | <br>                              |
| , ,                | İ                                 | plant material                                                                                                                                                                | İ                           | İ                             | İ                               | İ                             | İ                                  | İ                             | İ                             | İ                             | İ                                 |
|                    | 24-52                             | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam<br> Gravelly silt loam, gravelly<br>  sand, gravelly loam, very<br>  gravelly sandy loam,<br>  sandy loam |                             |                               |                                 | 100<br> 85-100<br> 45-100<br> | 85-95<br> 75-95<br> 35-90<br> <br> | 55-85<br> 45-85<br> 13-70<br> | 20-60<br> 20-60<br> 35-86<br> | 35-75<br> 35-75<br> 14-60<br> | 3-10<br>  3-10<br>  0-15<br> <br> |
| Nikolai            | 0-2                               | <br> Peat                                                                                                                                                                     | <br>                        | <br>                          | <br>                            |                               |                                    |                               |                               |                               |                                   |
|                    | 2-32<br> 32-41<br> <br> <br> <br> | Muck<br> Silt loam, very fine sandy<br>  loam, fine sandy loam,<br>  gravelly very fine sandy loam,<br>  gravelly fine sandy loam,<br>  gravelly silt loam                    | <br>  0<br> <br> <br> <br>  | <br>  0-10<br> <br> <br> <br> | <br> 70-100<br> <br> <br> <br>  | <br> 60-100<br> <br> <br>     | <br> 55-95<br> <br> <br>           | <br> 30-85<br> <br> <br>      | <br> 20-65<br> <br> <br>      | <br> 30-75<br> <br> <br>      | <br>  3-10<br> <br> <br>          |
|                    | <br> 41-60<br> <br> <br> <br>     | Gravelly sand, loamy sand,<br>  sand, very gravelly loamy<br>  sand, gravelly loamy sand,<br>  very gravelly sand                                                             | <br>  0<br> <br> <br> <br>  | <br>  0-15<br> <br> <br> <br> | <br> 55-100<br> <br> <br> <br>  | <br> 45-100<br> <br> <br>     | <br> 30-75<br> <br> <br> <br>      | <br>  5-35<br> <br> <br>      | <br> 75-100<br> <br> <br>     | <br> 0-20<br> <br> <br>       | <br>  0-5<br> <br> <br> <br>      |

Table 9. Engineering Sieve Data—Continued

| Map symbol            | Depth                    | USDA texture                                                                                                                                                                 | Fragn                         |                               |                                 | entage pa<br>e numbei         |                               |                               | <br>  Sand                    | <br>  Silt                    | <br>  Clay                   |
|-----------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|
| and soil name         |                          | <br>                                                                                                                                                                         | >10<br> inches                | 3-10<br> inches               | <br>  4                         | 10                            | 40                            | 200                           | - <br> <br>                   | <br> <br>                     | <br> <br>                    |
|                       | ln.                      |                                                                                                                                                                              | Pct.                          | Pct.                          | ļ                               |                               | ļ                             | ¦                             | Pct.                          | Pct.                          | Pct.                         |
| 556:                  | <br>                     |                                                                                                                                                                              | <br>                          | <br>                          | <br>                            |                               | <br>                          |                               |                               |                               | <br>                         |
| Cohoe, dry            | -  0-2                   | Moderately decomposed<br>  plant material                                                                                                                                    | j                             | j<br>i                        | j                               | j                             | j                             | j                             | j                             | j                             | ļ                            |
|                       |                          | Very fine sandy loam, silt loam                                                                                                                                              |                               | 0                             | 100                             | 100                           | 85-95                         | 55-85                         | 20-60                         | 35-75                         | 3-10                         |
|                       |                          | Very fine sandy loam, silt loam<br> Gravelly sand, gravelly silt<br>  loam, gravelly loam, very<br>  gravelly sandy loam, sandy<br>  loam                                    | 0<br>  0<br> <br> <br>        | 0-8<br>  0-10<br> <br> <br>   | 90-100<br> 55-100<br> <br> <br> | 85-100<br> 45-100<br> <br>    | 75-95<br> 35-90<br> <br> <br> | 45-85<br> 13-70<br> <br> <br> | 20-60<br> 35-86<br> <br> <br> | 35-75<br> 14-60<br> <br> <br> | 3-10<br>  0-15<br> <br> <br> |
| Nikolai               |                          | Peat                                                                                                                                                                         | ļ                             | ļ                             | ļ                               |                               |                               |                               |                               |                               |                              |
|                       |                          | Muck  Very fine sandy loam, gravelly   fine sandy loam, gravelly silt   loam, silt loam, gravelly very   fine sandy loam, fine sandy                                         | <br>  0<br> <br> <br>         | <br>  0-10<br> <br> <br>      | <br> 70-100<br> <br> <br>       | <br> 60-100<br> <br>          | <br> 55-95<br> <br> <br>      | <br> 30-85<br> <br>           | <br> 20-65<br> <br> <br>      | <br> 30-75<br> <br> <br>      | <br>  3-10<br> <br>          |
|                       | <br> 41-60<br> <br>      | loam<br> Sand, gravelly sand, loamy<br>  sand, gravelly loamy sand,<br>  very gravelly loamy sand,<br>  very gravelly sand                                                   | <br>  0<br> <br> <br>         | <br>  0-15<br> <br> <br>      | <br> 55-100<br> <br> <br> <br>  | <br> 45-100<br> <br> <br>     | <br> 30-75<br> <br> <br>      | <br>  5-35<br> <br> <br>      | <br> 75-100<br> <br>          | <br>  0-20<br> <br> <br>      | <br>  0-5<br> <br> <br>      |
| 557:                  |                          |                                                                                                                                                                              | <u> </u>                      | <u> </u>                      |                                 |                               |                               |                               |                               |                               |                              |
| Cytex Creek           | -  0-2<br>               | Slightly decomposed<br>  plant material                                                                                                                                      | <br>                          | <br>                          | <br>                            | <br>                          |                               |                               | <br>                          |                               | <br>                         |
|                       | 2-3<br>  3-7             | Very fine sandy loam, silt loam<br>Silt loam, very fine sandy                                                                                                                | 0<br>  0                      | 0<br>  0                      | 100<br>  100                    | 100<br>100                    | 85-95<br> 80-90               | 70-85<br>45-75                | 25-50<br> 35-70               | 40-65<br> 25-60               | 3-10                         |
|                       | 7-31                     | loam, fine sandy loam<br> Silt loam, gravelly fine sandy<br>  loam, fine sandy loam, sandy<br>  loam                                                                         | <br>  0<br>                   | <br>  0-10<br>                | <br> 75-100<br>                 | <br> 70-100<br>               | <br> 55-90<br>                | <br> 30-70<br>                | <br> 35-70<br>                | <br> 25-60<br>                | 3-10                         |
|                       | 31-60                    | Extremely gravelly loamy fine<br>  sand, very cobbly loamy sand                                                                                                              | 0-15                          | 20-40<br> <br>                | <br> 50-80<br>                  | 35-70                         | 25-55<br>                     | 3-15                          | 80-95                         | 5-15                          | 0-5                          |
| 558:<br>Doroshin      |                          | <br> Mucky peat<br> Silt loam, very fine sandy loam                                                                                                                          | <br> <br>  0                  | <br> <br>  0                  | <br> <br>  100                  | <br> <br> 90-100              | <br> <br> 85-90               | <br> <br> 70-85               | <br> <br> 25-55               | <br> <br> 35-75               | <br> <br>  0-5               |
| 559:                  |                          |                                                                                                                                                                              |                               |                               |                                 |                               |                               |                               |                               |                               |                              |
| Doroshin              |                          | Mucky peat<br> Silt loam, very fine sandy loam<br>                                                                                                                           | <br>  0<br>                   | <br>  0<br>                   | <br>  100<br>                   | <br> 90-100<br>               | <br> 85-90<br>                | <br> 70-85<br>                | <br> 25-55<br>                | <br> 35-75<br>                | <br>  0-5<br>                |
| 560:<br>Dystrocryepts | <br>-  0-2               | <br> Slightly decomposed<br>  plant material                                                                                                                                 | <br> <br>                     | <br> <br>                     | <br> <br>                       | <br>                          | <br>                          |                               |                               | <br>                          | <br>                         |
|                       | 2-7                      | Silt loam, gravelly sandy loam,<br>  very gravelly fine sandy<br>  loam, very fine sandy loam                                                                                | 0-5                           | 0-5<br>                       | 40-95<br>                       | 25-90                         | 20-80                         | 9-65                          | 30-75                         | 20-65                         | 0-5                          |
|                       | 7-23                     | Extremely gravelly loamy sand, gravelly fine sandy                                                                                                                           | <br>  0-2<br>                 | <br>  0-3<br>                 | <br> 35-70<br>                  | <br> 20-65<br>                | <br> 15-50<br>                | 4-25                          | <br> 65-85<br>                | 10-35                         | <br> 2-5<br>                 |
|                       | <br> 23-60<br> <br> <br> | loam, gravelly loamy sand<br>Very gravelly fine sandy loam,<br>very gravelly loamy sand,<br>very cobbly loamy sand,<br>gravelly fine sandy loam,<br>extremely gravelly sand, | <br>  0-25<br> <br> <br> <br> | <br>  0-35<br> <br> <br> <br> | <br> 30-70<br> <br> <br> <br>   | <br> 15-65<br> <br> <br> <br> | <br>  9-50<br> <br> <br> <br> | <br> 1-25<br> <br> <br>       | <br> 65-100<br> <br> <br>     | <br>  0-35<br> <br> <br> <br> | <br>  0-5<br> <br> <br> <br> |
|                       |                          | extremely stony sand                                                                                                                                                         | <br>                          |                               |                                 |                               |                               |                               |                               | Pct.                          |                              |

Table 9. Engineering Sieve Data—Continued

| Map symbol                | <br>  Depth                   | USDA texture                                                                                                               | Fragn<br> <br>  >10        | nents                    |                               | entage pa<br>e number         |                               |                               | <br>  Sand               | <br>  Silt              | <br>  Clay                   |
|---------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------|-------------------------|------------------------------|
| and soil name             | <br> <br>                     | <br>                                                                                                                       | inches                     |                          |                               | 10                            | 40                            | 200                           | -                        |                         | <br>                         |
|                           | <br>  In.                     |                                                                                                                            | Pct.                       | Pct.                     | <br>                          |                               |                               |                               | Pct.                     | Pct.                    | Pct.                         |
| 560:<br>Typic Cryorthents | <br> <br>  0-1<br>            | <br> <br> Slightly decomposed plant<br>  material, gravelly slightly                                                       | <br> <br>                  | <br> <br>                | <br> <br>                     | <br>                          | <br> <br>                     |                               |                          |                         | <br> <br>                    |
|                           | <br>  1-33<br>                | decomposed plant material<br>Gravelly very fine sandy loam,<br>silty clay loam, very fine                                  | <br>  0-4<br>              | <br>  0-15<br>           | <br> 60-100<br>               | <br> 50-100<br>               | <br> 45-95<br>                | <br> 25-85<br>                | <br> 20-70<br>           | <br> 30-60<br>          | <br>  0-30<br>               |
|                           | <br> 33-60<br> <br>           | sandy loam<br> Very fine sandy loam, very<br>  gravelly silt loam, cobbly silty<br>  clay loam                             | <br>  0-4<br> <br>         | <br>  0-25<br> <br>      | <br> 60-100<br> <br>          | <br> 50-100<br> <br>          | <br> 45-95<br> <br>           | <br> 25-80<br> <br>           | <br> 20-60<br> <br>      | <br> 35-70<br> <br>     | <br>  0-30<br> <br>          |
| Iliamna, cool             | 0-2                           | <br> Moderately decomposed<br>  plant material                                                                             |                            | <br>                     | <br>                          |                               |                               |                               |                          |                         |                              |
|                           | <br>  2-29<br>                | Silt loam, mucky silt<br>  loam, very fine sandy<br>  loam, fine sandy loam                                                | 0                          | <br>  0<br>              | <br>  100<br>                 | 100                           | <br> 80-95<br>                | <br> 50-80<br>                | <br> 25-60<br>           | <br> 35-65<br>          | <br> 3-8<br>                 |
|                           | <br> 29-60<br> <br>           | Loamy fine sand,<br>gravelly sand, very<br>gravelly sand, sand                                                             | 0<br> <br> <br>            | 0-30<br> <br>            | <br> 50-100<br> <br>          | 40-100<br> <br>               | <br> 20-70<br> <br>           | 4-35<br> <br>                 | 70-100<br> <br>          | 0-30                    | 0-5<br> <br>                 |
| 561:<br>Foreland          | 1012                          | <br>                                                                                                                       | ļ                          |                          | į                             |                               |                               | į                             |                          |                         |                              |
|                           |                               | Fine sandy loam, loamy                                                                                                     | 0                          | 0                        | 95-100                        | 90-100                        | 85-95                         | 8-35                          | 70-100                   | 0-25                    | 0-5                          |
|                           | <br> 19-60<br> <br> <br>      | sand, sand<br> Gravelly sand, gravelly<br>  loamy sand, sand,<br>  loamy sand, gravelly<br>  sandy loam                    | <br>  0<br> <br> <br>      | <br>  0<br> <br>         | <br> 75-100<br> <br> <br>     | <br> 70-100<br> <br> <br>     | <br> 60-90<br> <br> <br>      | <br>  6-35<br> <br> <br>      | <br> 70-100<br> <br>     | <br> 0-25<br> <br>      | <br>  0-5<br> <br> <br>      |
| 562:                      |                               | <br>                                                                                                                       |                            |                          | !<br>!                        |                               |                               |                               |                          |                         |                              |
| Foreland                  |                               | Fine sandy loam, sand,                                                                                                     | <del></del><br>  0         | <br>  0                  | <br> 95-100                   | 90-100                        | <br> 85-95                    | <br>  8-35                    | 70-100                   | 0-25                    | <br>  0-5                    |
|                           | <br> 19-60<br> <br> <br>      | loamy sand<br> Gravelly sand, gravelly<br> loamy sand, sand,<br> loamy sand, gravelly<br>  sandy loam                      | <br>  0<br> <br> <br>      | <br>  0<br> <br>         | <br> 75-100<br> <br> <br>     | <br> 70-100<br> <br> <br>     | <br> 60-90<br> <br> <br>      | <br>  6-35<br> <br> <br>      | <br> 70-100<br> <br>     | <br> 0-25<br> <br>      | <br>  0-5<br> <br> <br>      |
| Soldotna                  | <br>  0-4                     | <br> Moderately decomposed                                                                                                 | <br>                       | <br>                     | <br>                          |                               | <br>                          |                               |                          |                         | <br>                         |
|                           | <br>  4-7                     | plant material<br> Silt loam, very fine                                                                                    | <br>  0                    | 0                        | <br>  100                     | 100                           | <br> 80-95                    | <br> 45-75                    | <br> 30-65               | <br> 40-65              | <br>  0-5                    |
|                           | <br>  7-22                    | sandy loam<br>Silt loam, very fine                                                                                         | <br>  0                    | 0                        | <br>  100                     | 100                           | <br> 80-95                    | <br> 45-75                    | <br> 30-65               | <br> 40-65              | <br>  0-5                    |
|                           | <br> 22-29<br>                | sandy loam Very fine sandy loam, gravelly silt loam,                                                                       | <br>  0<br>                | <br>  0<br>              | <br> 60-100<br>               | <br> 45-100<br>               | <br> 40-90<br>                | <br> 20-75<br>                | <br> 30-65<br>           | <br> 40-65<br>          | <br> 0-5<br>                 |
|                           | <br> 29-60<br> <br> <br> <br> | silt loam<br> Very gravelly sand,<br>  stratified very<br>  gravelly sand to silt<br>  loam, very gravelly<br>  loamy sand | <br>  0<br> <br> <br> <br> | <br>  0-15<br> <br> <br> | <br> 50-70<br> <br> <br> <br> | <br> 40-60<br> <br> <br> <br> | <br> 20-55<br> <br> <br> <br> | <br>  4-35<br> <br> <br> <br> | <br> 45-95<br> <br> <br> | <br> 5-55<br> <br> <br> | <br>  0-5<br> <br> <br> <br> |
| Starichkof                |                               | Peat<br> Stratified mucky peat<br>  to silt loam to ashy<br>  sand                                                         | <br> <br> <br> <br>        | <br> <br> <br>           | <br> <br> <br> <br>           | <br> <br> <br>                | <br> <br> <br>                | <br> <br> <br>                | <br> <br>                | <br> <br>               | <br> <br> <br> <br>          |

Table 9. Engineering Sieve Data—Continued

| 2-29            | Moderately decomposed   plant material   Fine sandy loam, very   fine sandy loam, mucky   silt loam, silt loam   Gravelly sand, sand, | >10<br> inches<br> <br>  Pct.<br> <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3-10<br> inches<br> <br>  Pct.<br> <br> <br> <br> <br>                                                                                                             | <br>  4<br> <br> <br> <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| <br>0-2<br>2-29 | plant material<br> Fine sandy loam, very<br>  fine sandy loam, mucky<br>  silt loam, silt loam<br> Gravelly sand, sand,               | <br> <br> <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| 0-2<br>2-29     | plant material<br> Fine sandy loam, very<br>  fine sandy loam, mucky<br>  silt loam, silt loam<br> Gravelly sand, sand,               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 0-2<br>2-29     | plant material<br> Fine sandy loam, very<br>  fine sandy loam, mucky<br>  silt loam, silt loam<br> Gravelly sand, sand,               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 2-29            | plant material<br> Fine sandy loam, very<br>  fine sandy loam, mucky<br>  silt loam, silt loam<br> Gravelly sand, sand,               | j                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 2-29            | plant material<br> Fine sandy loam, very<br>  fine sandy loam, mucky<br>  silt loam, silt loam<br> Gravelly sand, sand,               | j                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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|                 | fine sandy loam, mucky<br>silt loam, silt loam<br>Gravelly sand, sand,                                                                | j 0<br>!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| 29-60           | Gravelly sand, sand,                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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|                 | loamy fine sand, very<br>gravelly sand                                                                                                | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 2-29            | Silt loam, fine sandy<br>  loam, very fine sandy                                                                                      | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 0-2             | Moderately decomposed<br>  plant material                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 2-29            | loam, mucky silt loam,                                                                                                                | j 0<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| 2-29            | Very fine sandy loam,<br>mucky silt loam, silt                                                                                        | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 1-13            | Very fine sandy loam,                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 13-24           | Silt loam, very fine                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 24-33           | Very fine sandy loam,                                                                                                                 | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 33-60           | Fine sandy loam, very<br>  fine sandy loam,<br>  gravelly sandy loam,<br>  gravelly loamy sand,                                       | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 1 2 1 2         | 2-29<br>29-60<br>0-2<br>2-29<br>29-60<br>0-2<br>2-29<br>29-60<br>0-1<br>1-13<br>13-24<br>24-33                                        | plant material 2-29   Silt loam, fine sandy   loam, very fine sandy   loam, wery fine sandy   loam, wery fine sandy   loam, wery fine sandy   loam, mucky silt loam   very gravelly sand,   loamy fine sand   loamy fine sand   loamy fine sandy loam, very fine sandy loam   very fine sandy loam   very fine sandy loam   very fine sand,   gravelly sand,   loamy fine sand, sand,   gravelly sand   loamy fine sandy loam, mucky silt loam, silt   loam, fine sandy loam   very fine sandy loam   loamy fine sandy loam   loamy fine sandy loam   loamy fine sand, very   gravelly sand,   gravelly sand,   gravelly sand   silt loam   silt loam   silt loam   silt loam   silt loam   sandy loam,   silt loam   sandy loam,   silt loam   leandy loam,   silt loam   leandy loam,   silt loam   leandy loam,   silt loam   leandy loam,   silt loam   leandy loam,   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Table 9. Engineering Sieve Data—Continued

| <br> <br> <br>  In.<br> <br> <br>  0-1 | <br>                                                                                                                       | >10<br> inches                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| 24-33                                  | Very fine sandy loam, silt loam                                                                                            | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| 33-60<br> <br> <br> <br>               | Gravelly sandy loam, gravelly<br>  loamy sand, silt loam, fine<br>  sandy loam, very fine sandy<br>  loam                  | 0<br> <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| 24-33                                  | Silt loam, very fine sandy loam<br>Very fine sandy loam, fine                                                              | 0<br>  0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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                                                                                                                                                                                                                                                               | 100<br> 60-100<br> <br> <br>                                                                                                                                                                                               | 100<br> 50-100<br> <br>                                     | 90-98<br> 40-95<br> <br> <br>               | 55-85<br> 15-75<br> <br>                    | 25-65<br> 25-85<br> <br>                                                                                                                                                                                                                                                                                                                                                         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| <br> <br>  0-1                         | <br> <br> Slightly decomposed                                                                                              | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| İ                                      | plant material                                                                                                             | İ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 24-33                                  | Silt loam, very fine sandy loam<br>Very fine sandy loam, fine                                                              | 0<br>  0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| <br> <br>                              | <br>                                                                                                                       | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| İ                                      | plant material                                                                                                             | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| 3-8                                    |                                                                                                                            | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| 8-30                                   | Very fine sandy loam,                                                                                                      | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| <br> 30-60<br> <br> <br>               | Gravelly very fine sandy loam,<br>gravelly fine sandy loam, silt<br>loam, gravelly silt loam,<br>gravelly sandy loam, very | <br>  0<br> <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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|                                        | 13-24                                                                                                                      | 13-24   Silt loam, very fine sandy loam   24-33   Very fine sandy loam, silt loam   33-60   Gravelly sandy loam, gravelly   loamy sand, silt loam, fine   sandy loam, very fine sandy   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam | loamy sand, silt loam, fine sandy loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam   loam, silt loam   loam, silt loam   loam, silt loam   loam, silt loam   loam, silt loam   loam, silt loam   loam, silt loam, loam, silt loam, loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   loam, gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly   gravelly | 13-24   Silt loam, very fine sandy loam   0   0   24-33   Very fine sandy loam, silt loam   0   0   0   33-60   Gravelly sandy loam, gravelly   0   0-8   loamy sand, silt loam, fine   sandy loam, very fine sandy   loam | 13-24   Silt loam, very fine sandy loam   0                 | 13-24   Silt loam, very fine sandy loam   0 | 13-24   Silt loam, very fine sandy loam   0 | 13-24   Silt loam, very fine sandy loam   0   0   100   100   90-98   55-85   55-85   33-60   Gravelly sandy loam, gravelly   0   0-8   60-100   50-100   40-95   15-75   15-75   10amy sand, silt loam, fine sandy loam, very fine sandy loam   0   0   100   100   90-98   55-85   15-75   10amy sand, silt loam, gravelly loam   0   0   100   100   90-98   55-85   13-24   Very fine sandy loam, silt loam   0   0   100   100   90-98   55-85   13-24   Very fine sandy loam, silt loam   0   0   100   100   90-98   55-85   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75   15-75 | 13-24   Silf loam, very fine sandy loam   0 | 13-24   24-33   Very fine sandy loam, git loam   0   0   100   100   90-98   55-85   25-65   45-75   25-83   24-93   Very fine sandy loam, git loam   0   0   100   100   90-98   55-85   25-65   45-75   25-85   45-75   25-85   25-85   45-75   25-85   25-85   45-75   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25-85   25 |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | Depth                    | USDA texture                                                                                                                                                                         | Fragn<br> <br>  >10        | nents<br>  3-10               |                                     | entage pa<br>e number          |                               |                               | <br>  Sand                         | <br>  Silt                    | <br>  Clay                    |
|--------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------|-------------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------------------|-------------------------------|-------------------------------|
| and son name             | !<br> <br>               | <br>                                                                                                                                                                                 | > 10<br> inches            |                               | 4                                   | 10                             | 40                            | 200                           | -!<br> <br>                        |                               | <br> <br>                     |
|                          | <br>  In.<br>            | <br> <br>                                                                                                                                                                            | <br>  Pct.<br>             | <br>  Pct.<br>                | <br> <br>                           |                                | <br> <br>                     | <br> <br>                     | Pct.                               | Pct.                          | Pct.                          |
| 574:                     |                          |                                                                                                                                                                                      | į                          | į                             | į                                   | į                              | į                             | į                             | į                                  | į                             | į                             |
| Kachemak                 | -  0-3<br>               | Slightly decomposed<br>  plant material                                                                                                                                              | <br>                       | <br>                          | <br>                                |                                |                               |                               |                                    |                               |                               |
|                          | 3-8                      | Silt loam, very fine sandy<br>loam, mucky silt loam                                                                                                                                  | 0                          | 0                             | 95-100                              | 90-100                         | 75-95                         | 40-80                         | 25-65                              | 30-65                         | 0-10                          |
|                          | i                        | Silt loam, mucky silt loam,<br>very fine sandy loam                                                                                                                                  | <br>  0<br>                | <br>  0-6<br>                 | <br> 75-100<br>                     | 70-100                         | 60-95                         | 30-80                         | <br> 25-65<br>                     | 30-65                         | 0-10                          |
|                          | 30-60                    | Gravelly very fine sandy loam,<br>  gravelly fine sandy loam,<br>  gravelly silt loam, gravelly<br>  sandy loam, very fine sandy<br>  loam, silt loam                                | 0<br> <br> <br> <br> <br>  | 0-15<br> <br> <br> <br> <br>  | 65-100<br> <br> <br> <br> <br>      | 55-100<br> <br> <br> <br> <br> | 45-95<br> <br> <br> <br>      | 20-80<br> <br> <br> <br>      | 25-75<br> <br> <br> <br>           | 20-65<br> <br> <br> <br>      | 0-15<br> <br> <br> <br> <br>  |
| 575:                     |                          |                                                                                                                                                                                      |                            |                               | <u> </u>                            |                                |                               |                               |                                    |                               |                               |
| Kachemak                 | -  0 <b>-</b> 3<br>      | Slightly decomposed<br>  plant material                                                                                                                                              | <br>                       | <br>                          | <br>                                |                                | <br>                          |                               |                                    |                               | <br>                          |
|                          | 3-8                      | Very fine sandy loam,                                                                                                                                                                | 0                          | 0                             | 95-100                              | 90-100                         | 75-95                         | 40-80                         | 25-65                              | 30-65                         | 0-10                          |
|                          | <br>  8-30               | mucky silt loam, silt loam<br> Mucky silt loam, silt<br>  loam, very fine sandy loam                                                                                                 | <br>  0<br>                | <br>  0-6<br>                 | <br> 75-100<br>                     | 70-100                         | <br> 60-95<br>                | <br> 30-80<br>                | <br> 25-65<br>                     | <br> 30-65                    | 0-10                          |
|                          | 30-60                    | Gravelly silt loam, gravelly<br>fine sandy loam, gravelly<br>very fine sandy loam,<br>gravelly sandy loam, very<br>fine sandy loam, silt loam                                        | 0<br> <br> <br> <br>       | 0-15<br> <br> <br> <br>       | 65-100<br> <br> <br> <br> <br>      | 55-100<br> <br> <br> <br> <br> | 45-95<br> <br> <br> <br>      | 20-80<br> <br> <br> <br>      | 25-75<br> <br> <br> <br>           | 20-65<br> <br> <br> <br>      | 0-15<br> <br> <br> <br> <br>  |
| 576:                     |                          |                                                                                                                                                                                      |                            |                               | <u> </u>                            |                                |                               |                               |                                    |                               |                               |
| Kachemak                 | -  0-3<br>               | Slightly decomposed<br>  plant material                                                                                                                                              | <br>                       | <br>                          | <br>                                |                                | <br>                          |                               |                                    |                               | <br>                          |
|                          | 3-8                      | Silt loam, very fine                                                                                                                                                                 | 0                          | 0                             | 95-100                              | 90-100                         | 75-95                         | 40-80                         | 25-65                              | 30-65                         | 0-10                          |
|                          | <br>  8-30               | sandy loam, mucky silt loam Very fine sandy loam,                                                                                                                                    | <br>  0                    | <br>  0-6                     | <br> 75-100                         | <br> 70-100                    | <br> 60-95                    | <br> 30-80                    | <br> 25-65                         | <br> 30-65                    | <br> 0-10                     |
|                          | <br> 30-60<br> <br> <br> | mucky silt loam, silt loam<br> Silt loam, very fine sandy<br>  loam, gravelly sandy loam,<br>  gravelly silt loam, gravelly<br>  very fine sandy loam,<br>  gravelly fine sandy loam | <br>  0<br> <br> <br> <br> | <br>  0-15<br> <br> <br> <br> | <br> 65-100<br> <br> <br> <br> <br> | <br> 55-100<br> <br> <br> <br> | <br> 45-95<br> <br> <br> <br> | <br> 20-80<br> <br> <br> <br> | <br> 25-75<br> <br> <br> <br> <br> | <br> 20-65<br> <br> <br> <br> | <br>  0-15<br> <br> <br> <br> |
| 577:                     |                          | <br>                                                                                                                                                                                 |                            | į                             | į                                   |                                | ļ                             |                               |                                    |                               | į                             |
| Kachemak                 | -  0-3<br>               | Slightly decomposed<br>  plant material                                                                                                                                              | <br>                       | <br>                          | <br>                                |                                |                               |                               |                                    |                               | <br>                          |
|                          | 3-8                      | Mucky silt loam, very<br>  fine sandy loam, silt loam                                                                                                                                | 0                          | 0                             | 95-100<br>                          | 90-100                         | 75 <b>-</b> 95                | 40-80<br>                     | 25-65                              | 30-65                         | 0-10                          |
|                          | 8-30                     | Mucky silt loam, silt                                                                                                                                                                | 0                          | 0-6                           | 75-100                              | 70-100                         | 60-95                         | 30-80                         | 25-65                              | 30-65                         | 0-10                          |
|                          | <br> 30-60<br> <br> <br> | loam, very fine sandy loam<br> Silt loam, very fine sandy<br> loam, gravelly sandy loam,<br>  gravelly silt loam, gravelly<br>  very fine sandy loam,<br>  gravelly fine sandy loam  | <br>  0<br> <br> <br>      | <br>  0-15<br> <br> <br>      | <br> 65-100<br> <br> <br>           | <br> 55-100<br> <br> <br> <br> | <br> 45-95<br> <br> <br>      | <br> 20-80<br> <br> <br> <br> | <br> 25-75<br> <br> <br> <br>      | <br> 20-65<br> <br> <br> <br> | <br> 0-15<br> <br> <br>       |
| 578:<br>Kachemak, cool   | <br> <br>                | <br> <br> Slightly decomposed                                                                                                                                                        | <br> <br>                  | <br> <br>                     | <br> <br>                           |                                |                               |                               |                                    |                               | <br>                          |
| radioman, 000i           | j                        | plant material<br>  Mucky silt loam, very                                                                                                                                            | <br> <br>  0               | <br> <br>  0                  | <br> <br> 95-100                    | <br> <br> 90-100               | <br> <br> 75-95               | <br> <br> 40-80               |                                    | 30-65                         | 0-10                          |
|                          | j                        | fine sandy loam, silt loam<br> Mucky silt loam, very                                                                                                                                 | <br> <br>  0               | <br> <br>  0-6                | j                                   | <br> <br> 70-100               | j                             | 30-80                         | <br> <br> 25-65                    | <br> <br> 30-65               | İ                             |
|                          | İ                        | fine sandy loam, silt loam [Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam, gravelly sandy loam                        | <br>  0<br> <br>           | İ                             | j                                   | <br> 55-100<br> <br> <br>      | İ                             | <br> 20-80<br> <br> <br>      | <br> 25-75<br> <br> <br>           | <br> 20-65<br> <br> <br>      | İ                             |

Table 9. Engineering Sieve Data—Continued

| Map symbol                 | <br>  Depth                        | USDA texture                                                                                                                                                                                                    | Fragn<br> <br>  >10              | nents                              |                                           | entage pa<br>e number                    |                                         |                               | <br>  Sand                         | <br>  Silt                         | <br>  Clay                             |
|----------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------------------|-------------------------------|------------------------------------|------------------------------------|----------------------------------------|
| and soil name              |                                    | <br>                                                                                                                                                                                                            |                                  | 3-10<br> inches                    | <br>  4                                   | 10                                       | 40                                      | 200                           | -                                  |                                    | <br>                                   |
|                            | <br>  In.                          |                                                                                                                                                                                                                 | Pct.                             | Pct.                               | <br>                                      |                                          |                                         |                               | Pct.                               | Pct.                               | Pct.                                   |
| 579:<br>Kachemak, cool     | <br> 0-3                           | <br> Slightly decomposed                                                                                                                                                                                        | <br>                             | <br>                               | <br>                                      | <br>                                     | <br>                                    |                               |                                    |                                    | <br>                                   |
|                            | <br>  3-8                          | plant material<br> Mucky silt loam, silt                                                                                                                                                                        | <br>  0                          | <br>  0                            | <br> 95-100                               | <br> 90-100                              | <br> 75-95                              | <br> 40-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br>  8-30                         | loam, very fine sandy loam<br>Silt loam, very fine sandy                                                                                                                                                        | <br>  0                          | <br>  0-6                          | <br> 75-100                               | <br> 70-100                              | <br> 60-95                              | <br> 30-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br> 30-60<br> <br> <br> <br> <br> | loam, mucky silt loam<br>Gravelly very fine sandy loam,<br>gravelly fine sandy loam, silt<br>loam, gravelly sandy loam,<br>gravelly silt loam, very fine<br>sandy loam                                          | <br>  0<br> <br> <br> <br>       | <br>  0-15<br> <br> <br> <br>      | <br> 65-100<br> <br> <br> <br> <br>       | <br> 55-100<br> <br> <br> <br> <br> <br> | <br> 45-95<br> <br> <br> <br> <br> <br> | <br> 20-80<br> <br> <br> <br> | <br> 25-75<br> <br> <br> <br>      | <br> 20-65<br> <br> <br> <br>      | <br>  0-15<br> <br> <br> <br> <br>     |
| 580:<br>Kachemak, cool     | <br>  0-3                          | <br> Slightly decomposed<br>  plant material                                                                                                                                                                    | <br>                             | <br>                               | <br>                                      | <br>                                     |                                         | <br>                          | <br>                               | <br>                               | <br>                                   |
|                            | 3-8                                | Silt loam, mucky silt                                                                                                                                                                                           | 0                                | 0                                  | <br> 95-100                               | 90-100                                   | 75-95                                   | 40-80                         | 25-65                              | 30-65                              | 0-10                                   |
|                            | 8-30                               | loam, very fine sandy loam<br>Mucky silt loam, very                                                                                                                                                             | 0                                | 0-6                                | <br> 75-100                               | 70-100                                   | 60-95                                   | 30-80                         | 25-65                              | 30-65                              | 0-10                                   |
|                            | <br> 30-60<br> <br> <br> <br>      | fine sandy loam, silt loam<br> Gravelly fine sandy loam,<br>  gravelly very fine sandy<br>  loam, gravelly silt loam,<br>  gravelly sandy loam, very<br>  fine sandy loam, silt loam                            | <br>  0<br> <br> <br> <br>       | <br>  0-15<br> <br> <br> <br> <br> | <br> 65-100<br> <br> <br> <br> <br>       | <br> 55-100<br> <br> <br> <br> <br>      | <br> 45-95<br> <br> <br> <br> <br>      | <br> 20-80<br> <br> <br>      | <br> 25-75<br> <br> <br> <br>      | <br> 20-65<br> <br> <br>           | <br>  0-15<br> <br> <br> <br> <br>     |
| 581:<br>Kachemak, cool     | 0-3                                | <br> <br> Slightly decomposed                                                                                                                                                                                   | <br> <br>                        | <br> <br>                          | <br> <br>                                 |                                          |                                         |                               |                                    |                                    | <br>                                   |
| radioman, door             | <br> <br>  3-8                     | plant material<br> Very fine sandy loam,                                                                                                                                                                        | <br> <br>  0                     | <br> <br>  0                       | <br> <br> 95-100                          | <br> 90-100                              | <br> <br> 75-95                         | <br> 40-80                    | 25-65                              | <br> 30-65                         | <br> <br>  0-10                        |
|                            |                                    | mucky silt loam, silt loam                                                                                                                                                                                      | 0<br> <br>  0                    | 0<br> <br>  0-6                    | İ                                         | İ                                        | <br> <br> 60-95                         | <br> <br> 30-80               | 25-65                              | į                                  | İ                                      |
|                            | İ                                  | Mucky silt loam, silt<br>  loam, very fine sandy loam<br> Very fine sandy loam, gravelly<br>  fine sandy loam, gravelly<br>  very fine sandy loam,<br>  gravelly silt loam, gravelly<br>  sandy loam, silt loam | 0<br> <br>  0<br> <br> <br> <br> | İ                                  | /3-100<br> <br> 65-100<br> <br> <br> <br> | İ                                        | <br> 45-95<br> <br> <br> <br>           | <br> 20-80<br> <br> <br> <br> | 25-05<br> <br> 25-75<br> <br> <br> | 30-65<br> <br> 20-65<br> <br> <br> | 0-10<br> <br>  0-15<br> <br> <br> <br> |
| 582:<br>Kachemak, cool     | 0-3                                | <br> Slightly decomposed                                                                                                                                                                                        | Í<br>                            | <br>                               | <br>                                      | <br>                                     | <br>                                    | <br>                          |                                    | <br>                               | Í<br>                                  |
|                            | <br>  3-8                          | plant material<br>Mucky silt loam, very                                                                                                                                                                         | ĺ<br>  0                         | ĺ<br>  0                           | <br> 95-100                               | <br> 90-100                              | <br> 75-95                              | <br> 40-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br>  8-30                         | fine sandy loam, silt loam<br> Mucky silt loam, very                                                                                                                                                            | j<br>  0                         | <br>  0-6                          | <br> 75-100                               | <br> 70-100                              | <br> 60-95                              | <br> 30-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br> 30-60<br> <br> <br> <br>      | fine sandy loam, silt loam<br> Gravelly fine sandy loam,<br>  gravelly very fine sandy<br>  loam, gravelly silt loam,<br>  gravelly sandy loam, very<br>  fine sandy loam, silt loam                            | <br>  0<br> <br> <br>            | <br>  0-15<br> <br> <br> <br>      | <br> 65-100<br> <br> <br> <br> <br>       | <br> 55-100<br> <br> <br> <br>           | <br> 45-95<br> <br> <br> <br> <br>      | <br> 20-80<br> <br> <br> <br> | <br> 25-75<br> <br> <br>           | <br> 20-65<br> <br> <br>           | <br>  0-15<br> <br> <br> <br> <br>     |
| 583:<br>Kachemak, forested | 0-3                                | <br> Slightly decomposed                                                                                                                                                                                        | <br>                             | <br>                               | <br>                                      |                                          |                                         |                               |                                    | <br>                               | <br>                                   |
|                            | <br>  3-8                          | plant material<br> Very fine sandy loam,                                                                                                                                                                        | <br>  0                          | <br>  0                            | <br> 95-100                               | <br> 90-100                              | <br> 75-95                              | <br> 40-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br>  8-30                         | mucky silt loam, silt loam<br> Mucky silt loam, silt                                                                                                                                                            | <br>  0                          | <br>  0-6                          | <br> 75-100                               | <br> 70-100                              | <br> 60-95                              | <br> 30-80                    | <br> 25-65                         | <br> 30-65                         | <br>  0-10                             |
|                            | <br> 30-60<br> <br> <br> <br> <br> | loam, very fine sandy loam<br> Gravelly fine sandy loam,<br>  gravelly very fine sandy<br>  loam, gravelly silt loam,<br>  gravelly sandy loam, very<br>  fine sandy loam, silt loam                            | <br>  0<br> <br> <br> <br>       | <br>  0-15<br> <br> <br> <br>      | <br> 65-100<br> <br> <br> <br> <br>       | <br> 55-100<br> <br> <br> <br> <br>      | <br> 45-95<br> <br> <br> <br> <br>      | <br> 20-80<br> <br> <br> <br> | <br> 25-75<br> <br> <br> <br> <br> | <br> 20-65<br> <br> <br> <br>      | <br>  0-15<br> <br> <br> <br> <br>     |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name   | <br>  Depth                   | <br>  USDA texture                                                                                                                                                                    | Fragn<br> <br>  >10       | nents                        |                                     | entage pa<br>e number               |                                    |                          | <br>  Sand                    | <br>  Silt                    | <br>  Clay                        |
|----------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------------------------|-------------------------------------|------------------------------------|--------------------------|-------------------------------|-------------------------------|-----------------------------------|
| and son name               |                               | <br>                                                                                                                                                                                  |                           | inches                       | <br>  4                             | 10                                  | 40                                 | 200                      | -                             |                               |                                   |
|                            | ln.                           |                                                                                                                                                                                       | Pct.                      | Pct.                         | <br> <br>                           |                                     |                                    |                          | Pct.                          | Pct.                          | Pct.                              |
| 584:                       |                               |                                                                                                                                                                                       | <br>                      | <br>                         | <br>                                | !                                   |                                    |                          |                               | -                             | !                                 |
| Kachemak, forested         | j                             | Slightly decomposed<br>  plant material                                                                                                                                               | <br>                      | <br>                         | <br>                                | <br>                                | <br>                               |                          |                               |                               | <br>                              |
|                            | 3-8<br>                       | Silt loam, very fine<br>  sandy loam, mucky silt loam                                                                                                                                 | 0<br>                     | 0<br>                        | 95-100<br>                          | 90-100<br>                          | 75-95<br>                          | 40-80<br>                | 25-65<br>                     | 30-65<br>                     | 0-10<br>                          |
|                            | 8-30<br>                      | Mucky silt loam, silt<br>  loam, very fine sandy loam                                                                                                                                 | [ 0<br>                   | 0-6<br>I                     | 75-100                              | 70-100                              | 60-95<br>                          | 30-80<br>i               | 25-65                         | 30-65                         | 0-10<br>                          |
|                            | 30-60<br> <br> <br> <br> <br> | Gravelly very fine sandy<br> loam, gravelly sandy loam,<br>  gravelly silt loam, gravelly<br> fine sandy loam, very<br> fine sandy loam, silt loam                                    | 0<br> <br> <br> <br> <br> | 0-15<br> <br> <br> <br> <br> | 65-100<br> <br> <br> <br> <br> <br> | 55-100<br> <br> <br> <br> <br> <br> | 45-95<br> <br> <br> <br> <br> <br> | 20-80                    | 25-75<br> <br> <br> <br> <br> | 20-65                         | 0-15<br> <br> <br> <br> <br> <br> |
| 585:<br>Kachemak, forested | 0-3                           | <br> Slightly decomposed                                                                                                                                                              | <br>                      | <br>                         | <br>                                |                                     |                                    |                          |                               |                               | <br>                              |
|                            | <br>  3-8                     | plant material<br> Silt loam, very fine                                                                                                                                               | <br>  0                   | <br>  0                      | <br> 95-100                         | 90-100                              | <br> 75-95                         | <br> 40-80               | <br> 25-65                    | <br> 30-65                    | <br>  0-10                        |
|                            | <br>  8-30                    | sandy loam, mucky silt loam   Mucky silt loam, silt                                                                                                                                   | <br>  0                   | <br>  0-6                    | <br> 75-100                         | <br> 70-100                         | <br> 60-95                         | <br> 30-80               | <br> 25-65                    | <br> 30-65                    | 0-10                              |
|                            | <br> 30-60<br> <br> <br>      | loam, very fine sandy loam<br> Gravelly very fine sandy loam,<br>  gravelly silt loam, gravelly<br>  sandy loam, gravelly fine<br>  sandy loam, silt loam, very<br>  fine sandy loam  | <br>  0<br> <br> <br>     | <br>  0-15<br> <br> <br>     | <br> 65-100<br> <br> <br>           | <br> 55-100<br> <br> <br>           | <br> 45-95<br> <br> <br> <br>      | <br> 20-80<br> <br> <br> | <br> 25-75<br> <br> <br>      | <br> 20-65<br> <br> <br>      | <br>  0-15<br> <br> <br>          |
| 586:                       |                               |                                                                                                                                                                                       | <br> <br>                 | <br> <br>                    | <br> <br>                           | ļ                                   |                                    |                          |                               | İ                             |                                   |
| Kachemak, cool             | 0-3                           | l<br> Slightly decomposed<br>  plant material                                                                                                                                         |                           |                              | <br>                                |                                     |                                    |                          |                               |                               |                                   |
|                            | 3-8                           | Silt loam, very fine                                                                                                                                                                  | 0                         | 0                            | <br> 95-100                         | 90-100                              | 75-95                              | 40-80                    | 25-65                         | 30-65                         | 0-10                              |
|                            | <br>  8-30                    | sandy loam, mucky silt loam Mucky silt loam, silt                                                                                                                                     | 0                         | <br>  0-6                    | <br> 75-100                         | 70-100                              | <br> 60-95                         | 30-80                    | <br> 25-65                    | 30-65                         | 0-10                              |
|                            | <br> 30-60<br> <br> <br> <br> | loam, very fine sandy loam<br> Gravelly fine sandy loam,<br>  gravelly silt loam, gravelly<br>  sandy loam, gravelly very<br>  fine sandy loam, very fine<br>  sandy loam, silt loam  | <br>  0<br> <br> <br>     | <br>  0-15<br> <br> <br>     | <br> 65-100<br> <br> <br> <br>      | <br> 55-100<br> <br> <br> <br>      | <br> 45-95<br> <br> <br> <br>      | <br> 20-80<br> <br> <br> | <br> 25-75<br> <br> <br>      | <br> 20-65<br> <br> <br>      | <br>  0-15<br> <br> <br> <br>     |
| Snowdance                  | <br>  0-3                     | <br> Slightly decomposed                                                                                                                                                              | <br>                      | <br>                         | <br>                                | <br>                                | <br>                               | <br>                     | <br>                          |                               | <br>                              |
|                            | <br>  3-8                     | plant material<br> Mucky silt loam, very                                                                                                                                              | <br>  0                   | <br>  0                      | <br>  100                           | 100                                 | <br> 85-95                         | <br> 60-80               | <br> 25-55                    | <br> 45-65                    | <br> 0-10                         |
|                            | <br>  8-24                    | fine sandy loam, silt loam<br> Gravelly silt loam,                                                                                                                                    | <br>  0                   | <br>  0-25                   | <br> 70-100                         | <br> 65-100                         | <br> 55-95                         | <br> 40-80               | <br> 25-50                    | <br> 50-65                    | <br>  0-10                        |
|                            | <br> 24-60<br> <br>           | silt loam, cobbly silt loam<br> Very gravelly fine sandy loam,<br>  very cobbly sandy loam,<br>  very gravelly sandy loam                                                             | <br>  0-6<br> <br>        | <br> 15-45<br> <br>          | <br> 50-80<br> <br>                 | <br> 35-75<br> <br>                 | <br> 25-60<br> <br>                | <br> 15-40<br> <br>      | <br> 50-70<br> <br>           | <br> 25-45<br> <br>           | <br>  0-5<br> <br>                |
| 587:<br>Kachemak, cool     | <br> <br> 0-3                 | <br> <br> Slightly decomposed                                                                                                                                                         | <br> <br>                 | <br> <br>                    | <br> <br>                           | <br>                                | <br>                               |                          |                               |                               | <br> <br>                         |
|                            | <br>  3-8                     | plant material<br> Mucky silt loam, very                                                                                                                                              | <br>  0                   | <br>  0                      | <br> 95-100                         | <br> 90-100                         | <br> 75-95                         | <br> 40-80               | <br> 25-65                    | <br> 30-65                    | <br>  0-10                        |
|                            | <br>  8-30                    | fine sandy loam, silt loam<br> Silt loam, very fine                                                                                                                                   | [<br>  0                  | <br>  0-6                    | <br> 75-100                         | <br> 70-100                         | <br> 60-95                         | 30-80                    | <br> 25-65                    | <br> 30-65                    | <br>  0-10                        |
|                            | <br> 30-60<br> <br> <br> <br> | sandy loam, mucky silt loam<br> Gravelly very fine sandy loam,<br>  gravelly fine sandy loam,<br>  gravelly silt loam, gravelly<br>  sandy loam, very fine sandy<br>  loam, silt loam | <br>  0<br> <br> <br>     | <br>  0-15<br> <br> <br>     | <br> 65-100<br> <br> <br> <br>      | <br> 55-100<br> <br> <br> <br>      | <br> 45-95<br> <br> <br> <br> <br> | <br> 20-80<br> <br> <br> | <br> 25-75<br> <br> <br> <br> | <br> 20-65<br> <br> <br> <br> |                                   |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | Depth                    | USDA texture                                                                                                                          | Fragm<br> <br>  >10   | nents<br><br>  3-10 |                                      | entage pa<br>e number          |                                |                           | <br>  Sand                 | <br>  Silt                | <br>  Clay                     |
|--------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------------------------------|--------------------------------|--------------------------------|---------------------------|----------------------------|---------------------------|--------------------------------|
| and son name             |                          |                                                                                                                                       | inches                |                     | 4                                    | 10                             | 40                             | 200                       | -!<br>                     |                           | <br>                           |
|                          | <br>  In.                |                                                                                                                                       | Pct.                  | Pct.                | <br>                                 |                                |                                | ·                         | Pct.                       | Pct.                      | Pct.                           |
| 587:                     | <br>                     | <br>                                                                                                                                  | <br>                  | <br>                | l<br>I                               |                                |                                |                           |                            |                           | <br>                           |
| Snowdance                | 0-3                      | Slightly decomposed                                                                                                                   | i                     |                     | i                                    | i                              |                                |                           |                            | i                         | i                              |
|                          | <br>  3-8                | plant material<br> Silt loam, mucky silt                                                                                              | <br>  0               | 0                   | <br>  100                            | 100                            | <br> 85-95                     | <br> 60-80                | <br> 25-55                 | <br> 45-65                | <br>  0-10                     |
|                          | <br>  8-24               | loam, very fine sandy loam<br> Gravelly silt loam, cobbly                                                                             | <br>  0               | 0-25                | <br> 70-100                          | <br> 65-100                    | <br> 55-95                     | <br> 40-80                | <br> 25-50                 | <br> 50-65                | <br>  0-10                     |
|                          | <br> 24-60<br> <br>      | silt loam, silt loam<br> Very cobbly sandy loam, very<br>  gravelly sandy loam, very<br>  gravelly fine sandy loam                    | <br>  0-6<br> <br>    | <br> 15-45<br> <br> | <br> 50-80<br> <br>                  | <br> 35-75<br> <br>            | <br> 25-60<br> <br>            | <br> 15-40<br> <br>       | <br> 50-70<br> <br>        | <br> 25-45<br> <br>       | <br> 0-5<br>                   |
| 588:                     |                          | <br>                                                                                                                                  | !<br>                 | <u> </u>            | <u> </u>                             |                                | <br>                           |                           |                            |                           |                                |
| Kachemak, cool           | 0-3<br>                  | Slightly decomposed<br>  plant material                                                                                               | j<br>i                | i                   | j<br>i                               | j                              | <br>                           | j                         | j                          | j                         | <br>                           |
|                          | 3-8                      | Silt loam, mucky silt<br>  loam, very fine sandy loam                                                                                 | i 0                   | 0                   | 95-100                               | 90-100                         | 75-95                          | 40-80<br>                 | 25-65                      | 30-65                     | 0-10                           |
|                          | 8-30                     | Very fine sandy loam,<br>  silt loam, mucky silt loam                                                                                 | 0                     | 0-6                 | 75-100                               | 70-100                         | 60-95                          | 30-80                     | 25-65                      | 30-65                     | 0-10                           |
|                          | 30-60<br> <br> <br> <br> | Gravelly very fine sandy  loam, gravelly sandy loam,  very fine sandy loam,  silt loam, gravelly silt loam,  gravelly fine sandy loam | 0<br> <br> <br> <br>  | 0-15<br> <br> <br>  | <br> 65-100<br> <br> <br> <br>       | 55-100<br> <br> <br> <br> <br> | <br> 45-95<br> <br> <br> <br>  | 20-80                     | 25-75<br> <br> <br>        | 20-65                     | 0-15<br> <br> <br> <br> <br>   |
| Snowdance                | 0-3                      | <br> Slightly decomposed                                                                                                              | <br>                  | <br>                | <br>                                 | <br>                           | <br>                           |                           |                            | <br>                      | <br>                           |
|                          | <br>  3-8                | plant material<br> Mucky silt loam, silt                                                                                              | <br>  0               | 0                   | <br>  100                            | 100                            | <br> 85-95                     | <br> 60-80                | <br> 25-55                 | <br> 45-65                | 0-10                           |
|                          | <br>  8-24               | loam, very fine sandy loam<br> Gravelly silt loam, cobbly                                                                             | <br>  0               | 0-25                | <br> 70-100                          | <br> 65-100                    | <br> 55-95                     | <br> 40-80                | <br> 25-50                 | <br> 50-65                | 0-10                           |
|                          | <br> 24-60<br> <br>      | silt loam, silt loam<br> Very gravelly fine sandy loam,<br>  very cobbly sandy loam,<br>  very gravelly sandy loam                    | <br>  0-6<br> <br>    | <br> 15-45<br> <br> | <br> 50-80<br> <br>                  | <br> 35-75<br> <br>            | <br> 25-60<br> <br>            | <br> 15-40<br> <br>       | <br> 50-70<br> <br>        | <br> 25-45<br> <br>       | <br>  0-5<br> <br>             |
| 589:                     |                          | <br>                                                                                                                                  | !<br>                 | !<br>               | i                                    |                                | <br>                           |                           | 1                          |                           | l                              |
| Kalifonsky               | 0-2                      | Moderately decomposed<br>  plant material                                                                                             |                       |                     |                                      |                                |                                |                           |                            |                           |                                |
|                          |                          | Silt loam<br>  Silt loam, very fine sandy loam<br>  Gravelly sand, gravelly loamy<br>  sand, sand, loamy sand                         | <br>  0<br>  0<br>  0 | 0<br>  0<br>  0-15  | <br> 80-100<br> 85-100<br> 65-95<br> | 75-100<br> 80-100<br> 60-90    | <br> 70-98<br> 75-98<br> 40-70 | 50-90<br> 50-90<br>  2-20 | 20-45<br> 20-60<br> 80-100 | 50-72<br> 45-72<br>  0-15 | <br> 5-10<br> 5-10<br> 0-5<br> |
| 590:<br>Kalifonsky       | 0-2                      | <br> <br> Moderately decomposed                                                                                                       | <br>                  | <br>                | <br> <br>                            |                                |                                |                           |                            |                           |                                |
|                          | <br> 2-9<br> 9-16        | plant material<br> Silt loam<br> Silt loam, very fine sandy loam                                                                      | <br>  0<br>  0        | <br>  0<br>  0      | <br> 80-100<br> 85-100               | <br> 75-100<br> 80-100         | <br> 70-98<br> 75-98           | <br> 50-90<br> 50-90      | <br> 20-45<br> 20-60       | <br> 50-72<br> 45-72      | <br> 5-10<br> 5-10             |
|                          |                          | Gravelly sand, loamy sand,<br>  gravelly loamy sand, sand                                                                             | 0<br>  0<br>          | 0-15                | 65-95<br>                            | 60-90<br>                      | 40-70<br>                      | 2-20                      | 80-100<br>                 | 0-15                      | 0-5                            |
| 591:<br>Kalifonsky       | <br>  0-2<br>            | <br> <br> Moderately decomposed<br>  plant material                                                                                   | <br> <br>             | <br>                | <br> <br>                            |                                | <br> <br>                      |                           |                            | <br>                      | <br>                           |
|                          | 2-9                      | Silt loam                                                                                                                             | 0                     | 0                   |                                      |                                | 70-98                          | 50-90                     | 20-45                      | 50-72                     | 5-10                           |
|                          |                          | Silt loam, very fine sandy loam<br> Gravelly loamy sand, gravelly<br>  sand, sand, loamy sand                                         | 0<br>  0<br>          | 0<br> 0-15<br>      | 85-100<br> 65-95<br>                 | 80-100<br> 60-90<br>           | 75-98<br> 40-70<br>            | 50-90<br>  2-20<br>       | 20-60<br> 80-100<br>       | 45-72<br>  0-15<br>       | 5-10<br>  0-5<br>              |

Table 9. Engineering Sieve Data—Continued

| Map symbol                    | <br>  Depth         | USDA texture                                                                                                 | Fragn<br>          |                 |                   | entage pa<br>e numbei |                     |                     | <br>  Sand           | <br>  Silt          | <br>  Clay        |
|-------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------|--------------------|-----------------|-------------------|-----------------------|---------------------|---------------------|----------------------|---------------------|-------------------|
| and soil name                 | <br>                | <br>                                                                                                         | >10<br> inches     | 3-10<br> inches | <br>  4           | 10                    | 40                  | 200                 | . <br>               |                     |                   |
|                               | <br>  In.           | <u> </u>                                                                                                     | <br>  Pct.         | <br>  Pct.      | <br>              |                       |                     |                     | <br>  Pct.           | <br>  Pct.          | <br>  Pct.        |
| 591:<br>Typic Cryorthents     | <br>  0-1<br>       | <br> Gravelly slightly decomposed<br>  plant material, slightly                                              | <br> <br>          | <br> <br>       | <br> <br>         | <br> <br>             | <br> <br>           | <br> <br>           | <br> <br>            | <br> <br>           | <br> <br>         |
|                               | <br>  1-33<br>      | decomposed plant material<br> Very fine sandy loam, silty clay<br>  loam, gravelly very fine sandy<br>  loam | <br>  0-4<br>      | <br>  0-15<br>  | <br> 60-100<br>   | <br> 50-100<br>       | <br> 45-95<br>      | <br> 25-85<br>      | <br> 20-70<br>       | <br> 30-60<br>      | 0-30              |
|                               | <br> 33-60<br> <br> | Very fine sandy loam, very<br>  gravelly silt loam, cobbly<br>  silty clay loam                              | <br>  0-4<br> <br> | 0-25<br> <br>   | 60-100<br> <br>   | 50-100                | <br> 45-95<br> <br> | 25-80<br>           | 20-60                | 35-70<br>           | 0-30              |
| 592:                          | <br>                | <br>                                                                                                         | <br>               | <br>            | <br>              |                       |                     |                     |                      |                     | <br>              |
| Karluk                        | 0-3                 | Highly decomposed                                                                                            | j<br>i             | j<br>i          | j                 | j                     | j                   | j                   | j                    | j                   | j                 |
|                               |                     | Silt loam                                                                                                    | 0                  | 0               | 100               | 100                   | 90-100              | 80-100              | 7-15                 | 65-78               |                   |
|                               |                     | Silt loam<br> Silt loam<br>                                                                                  | 0<br>  0<br>       | 0<br>  0        | 100<br>  100      | 100<br>  100          | 90-100<br> 92-100   | 80-100<br> 85-100   | 5-15<br>  2-15<br>   | 60-80<br> 60-80     | 15-25<br> 18-25   |
| 593:<br>Kashwitna             | <br> <br> 0-3       | <br> <br> Slightly decomposed                                                                                | <br> <br>          | <br> <br>       | <br> <br>         |                       | <br>                | <br>                |                      |                     | <br>              |
|                               |                     | plant material                                                                                               | <u> </u>           | <u> </u>        | İ                 | İ                     | İ                   | İ                   | i                    |                     |                   |
|                               | 3-5<br>  5-21       | Silt loam<br> Very fine sandy loam, silt loam                                                                | 0                  | 0<br>  0        | 100<br>  100      | 100<br> 90-100        | 90-100<br> 80-95    | 75-85               | 25-50                | 50-65<br> 40-65     | 0-10<br>  0-10    |
|                               |                     | Very gravelly sand, very   gravelly loamy sand                                                               | 0<br>  0<br>       |                 | 100<br> 45-65<br> | 30-55                 | 20-40               | 65-80<br>  1-15<br> | 35-55<br> 80-100<br> | 0-15                | 0-10              |
| 594:                          |                     | <br>                                                                                                         | <br>               | <br>            | <br>              |                       |                     |                     |                      |                     |                   |
| Kashwitna                     | 0-3<br>             | Slightly decomposed<br>  plant material                                                                      | <br>               | <br>            | <br>              | <br>                  | <br>                | <br>                | <br>                 | <br>                | <br>              |
|                               |                     | Silt loam                                                                                                    | 0                  | 0               | 100<br>  100      | 100                   | 90-100<br> 80-95    |                     | 25-50                | 50-65               | 0-10              |
|                               |                     | Very fine sandy loam, silt loam<br> Very gravelly loamy<br>  sand, very gravelly sand                        | 0<br>  0<br>       | 0<br> 0-20<br>  | 100<br> 45-65<br> | 90-100<br> 30-55<br>  | 20-40<br>           | 65-80<br>  1-15<br> | 35-55<br> 80-100<br> | 40-65<br>  0-15<br> | 0-10<br>  0-5<br> |
| 595:                          |                     |                                                                                                              | !<br>!             | <br>            | <br>              | ļ<br>ļ                | <br>                |                     |                      |                     | ļ<br>ļ            |
| Kashwitna                     | 0-3<br>             | Slightly decomposed<br>  plant material                                                                      | <br>               | <br>            | <br>              |                       |                     |                     |                      |                     |                   |
|                               | 3-5                 | Silt Ioam                                                                                                    | 0                  | 0               | 100               | 100                   |                     | 75-85               | 25-50                | 50-65               | 0-10              |
|                               |                     | Very fine sandy loam, silt loam  Very gravelly sand,                                                         | 0<br>  0           | 0<br> 0-20      | 100<br> 45-65     | 90-100<br> 30-55      | 80-95<br> 20-40     | 65-80<br>  1-15     | 35-55<br> 80-100     | 40-65<br>  0-15     | 0-10<br>  0-5     |
|                               | <br>                | very gravelly loamy sand                                                                                     | <br>               | <br>            | <br>              |                       | <br>                |                     |                      |                     | <br>              |
| 596:<br>Kashwitna, moderately | <br>  0-3           | <br> Slightly decomposed                                                                                     | <br>               | <br>            | <br>              | <br>                  | <br>                | <br>                | <br>                 | <br>                | <br>              |
| steep                         |                     | plant material<br> Silt loam                                                                                 | <br>  0            | <br>  0         | <br>  100         | <br>  100             | <br> 90-100         | <br> 75.05          | <br> 25-50           | <br> 50-65          | <br>  0-10        |
|                               |                     | Very fine sandy loam, silt loam                                                                              |                    | 0               | 100               | 90-100                | 80-95               | 65-80               | 35-55                | 40-65               | 0-10              |
|                               | 21-60<br>           | Very gravelly loamy<br>  sand, very gravelly sand                                                            | 0<br>              | 0-20<br>        | 45-65<br>         | 30-55<br>             | 20-40<br>           | 1-15<br>            | 80-100<br>           | 0-15<br>            | 0-5<br>           |
| Kashwitna, strongly           | <br>  0-3           | <br> Slightly decomposed                                                                                     | <br>               | <br>            | <br>              | <br>                  | <br>                | <br>                | <br>                 | <br>                | <br>              |
| sloping                       |                     | plant material<br> Silt loam                                                                                 |                    |                 |                   |                       | 00 100              |                     |                      | <br> E0 6E          | 0.10              |
|                               | 3-5<br>  5-21       | Silt loam, very fine sandy loam                                                                              | 0<br>  0           | 0<br>  0        | 100<br>  100      | 100<br> 90-100        | 90-100<br> 80-95    | 75-85<br> 65-80     | 25-50<br> 35-55      | 50-65<br> 40-65     | 0-10<br>  0-10    |
|                               | 21-60<br>           | Very gravelly sand, very<br>gravelly loamy sand                                                              | 0<br> <br>         | 0-20<br>        | 45-65<br> <br>    | 30-55<br>             | 20-40               | 1-15<br>            | 80-100<br>           | 0-15                | 0-5<br>           |
| 597:<br>Kenai                 | <br> <br> 0-2       | <br> <br> Moderately decomposed                                                                              | <br> <br>          | <br> <br>       | <br> <br>         |                       | <br> <br>           |                     |                      |                     | <br> <br>         |
|                               | j                   | plant material                                                                                               | İ                  | İ               | İ                 | İ                     | İ                   | İ                   | İ                    | İ                   | İ                 |
|                               |                     | Very fine sandy loam, silt loam<br> Very fine sandy loam, silt loam                                          |                    | 0<br>  0        | 100<br>  100      | 100<br>  100          | 80-95<br> 80-95     | 50-80<br> 50-80     | 25-60<br> 25-60      | 35-65<br> 35-65     | 5-10<br>  5-10    |
|                               |                     | Silt loam, loam, very                                                                                        | 0<br>  0           | 0<br>  0        | 90-100            |                       | 75-97               | 40-85               | 20-70                | 25-75               | 3-10              |
|                               | <br> 25-60          | fine sandy loam<br> Silty clay loam, silt loam,                                                              | j<br>I 0           | j<br>i 0        | <br> 85-100       | j<br> 80-100          | <br> 75-99          | j<br> 50-95         | <br>  5-45           | j<br> 35-75         | 20-25             |
|                               |                     | gravelly loam                                                                                                |                    |                 |                   |                       |                     |                     |                      |                     |                   |

Table 9. Engineering Sieve Data—Continued

| Map symbol              | Depth          | USDA texture                                             | Fragn<br>    |                |                 | entage pa<br>e numbei |                 |                | <br>  Sand     | <br>  Silt     | <br>  Clay     |
|-------------------------|----------------|----------------------------------------------------------|--------------|----------------|-----------------|-----------------------|-----------------|----------------|----------------|----------------|----------------|
| and soil name           |                |                                                          |              | 3-10<br>inches | 4               | 10                    | 40              | 200            | -!<br>!        |                |                |
|                         | <br>  In.      |                                                          | <br>  Pct.   | Pct.           | <br>            |                       | <br>            | -  <br>        | Pct.           | Pct.           | Pct.           |
| 598:                    |                | <br>                                                     | <br>         | <br>           | <u> </u>        |                       |                 |                |                | l<br>I         |                |
| Kenai                   | 0-2            | Moderately decomposed<br>  plant material                | i            | j              | j               | ļ                     | j               | j              | j              |                | ļ              |
|                         | 2-6            | Very fine sandy loam, silt loam                          | 0            | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | 6-19           | Silt loam, very fine sandy loam                          |              | j o            | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | İ              | Loam, very fine sandy loam,<br>  silt loam               | 0            | 0              | 90-100          | 85-100<br>            | 75-97<br>       | 40-85<br>      | 20-70          | 25-75          | İ              |
|                         | 25-60          | Gravelly loam, silty clay loam,<br>  silt loam           | 0<br>        | 0<br>          | 85-100<br>      | 80-100<br>            | 75-99<br>       | 50-95<br>      | 5-45<br>       | 35-75<br>      | 20-35          |
| 599:                    | <br>           |                                                          | <br>         | <br>           | <br>            |                       |                 |                |                |                |                |
| Kenai                   | 0-2<br>        | Moderately decomposed<br>  plant material                | <br>         | j<br>          | j<br>j          | j                     | j               | j              | j              | j              | j<br>          |
|                         | 2-6            | Silt loam, very fine sandy loam                          |              | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         |                | Silt loam, very fine sandy loam                          |              | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          |                |
|                         |                | Loam, silt loam, very fine<br>  sandy loam               | 0<br>        | 0<br>          | 90-100<br>      | 85-100<br>            | 75-97<br>       | 40-85<br>      | 20-70<br>      | 25-75<br>      | İ              |
|                         | 25-60          | Gravelly loam, silt loam,<br>  silty clay loam           | 0<br>        | 0<br>          | 85-100<br>      | 80-100<br>            | 75-99<br>       | 50-95<br>      | 5-45<br>       | 35-75<br>      | 20-35          |
| 600:                    |                | <br>                                                     | <br>         | <br>           | <br>            |                       |                 |                |                |                |                |
| Kenai                   | 0-2<br>        | Moderately decomposed<br>  plant material                | <br>         | <br>           | <br>            |                       |                 |                |                |                |                |
|                         | 2-6            | Very fine sandy loam, silt loam                          | 0            | j 0            | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         |                | Very fine sandy loam, silt loam                          | 0            | j 0            | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | 19-24<br>      | Silt loam, loam, very<br>  fine sandy loam               | 0<br>        | 0<br>          | 90-100<br>      | 85-100<br>            | 75-97<br>       | 40-85<br>      | 20-70<br>      | 25-75<br>      | 3-10<br>       |
|                         | 25-60          | Silt loam, gravelly<br>  loam, silty clay loam           | 0            | i 0<br>!       | 85-100          | 80-100                | 75-99           | 50-95          | 5-45<br>       | 35-75          | 20-35          |
| 601:                    |                | <br>                                                     |              | <u> </u>       | <u> </u>        |                       |                 |                |                | l<br>I         |                |
| Kenai                   | 0-2<br>        | Moderately decomposed<br>  plant material                | <br>         | <br>           | <br>            |                       | <br>            | <br>           |                |                |                |
|                         | 2-6            | Silt loam, very fine<br>  sandy loam                     | 0            | 0              | 100<br>         | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | 6-19           | Very fine sandy loam,<br>  silt loam                     | 0            | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | 19-24          | Very fine sandy loam,<br>  silt loam, loam               | 0            | 0              | 90-100          | 85-100                | 75-97           | 40-85          | 20-70          | 25-75          | 3-10           |
|                         | <br> 25-60<br> | Gravelly loam, silt<br>  loam, silty clay loam           | <br>  0<br>  | <br>  0<br>    | <br> 85-100<br> | <br> 80-100<br>       | <br> 75-99<br>  | <br> 50-95<br> | 5-45           | 35-75          | <br> 20-35<br> |
| 602:                    |                |                                                          | <br>         | <br>           | <br>            |                       |                 |                |                |                |                |
| Kenai, moderately steep | 0-2            | Moderately decomposed<br>  plant material                | <br>         | <br> <br>      | <br>            |                       | ļ               | ļ              |                |                | ļ              |
|                         | 2-6            | Very fine sandy loam, silt loam                          | 0            | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         |                | Silt loam, very fine sandy loam<br>Silt loam, loam, very | 0<br>  0     | 0<br>  0       | 100<br> 90-100  | 100<br> 85-100        | 80-95<br> 75-97 | 50-80<br>40-85 | 25-60<br>20-70 | 35-65<br>25-75 | 5-10<br>3-10   |
|                         | 25-60          | fine sandy loam<br> Silt loam, gravelly                  | 0            | <br>  0        | <br> 85-100     | <br> 80-100           | <br> 75-99      | <br> 50-95     | <br>  5-45     | <br> 35-75     | 20-35          |
|                         |                | loam, silty clay loam                                    | <br>         | <br>           | <br>            |                       |                 |                |                |                |                |
| Kenai, gently sloping   | 0-2            | Moderately decomposed<br>  plant material                | <br>         | ļ              | ļ               |                       |                 |                |                |                | ļ              |
|                         | 2-6            | Silt loam, very fine                                     | 0            | 0              | 100             | 100                   | 80-95           | 50-80          | 25-60          | 35-65          | 5-10           |
|                         | <br>  6-19     | sandy loam<br>Silt loam, very fine                       | <br>  0      | 0              | <br>  100       | 100                   | <br> 80-95      | <br> 50-80     | <br> 25-60     | <br> 35-65     | 5-10           |
|                         | <br> 19-24     | sandy loam<br>Silt loam, loam, very                      | <br>  0      | <br>  0        | <br> 90-100     | <br> 85-100           | <br> 75-97      | <br> 40-85     | <br> 20-70     | <br> 25-75     | <br> 3-10      |
|                         | İ              | fine sandy loam<br> Gravelly loam, silt                  | <br> <br>  0 | <br> <br>  0   | İ               | İ                     | <br> <br> 75-99 | 50-95          | 5-45           | 35-75          | İ              |
|                         |                | loam, silty clay loam                                    |              | "              |                 |                       |                 | 100-00         | 70             |                |                |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | Depth                         | USDA texture                                                                                                                                                          | Fragn<br> <br>  >10          | nents                         |                                    | entage pa<br>e numbe          |                             |                           | <br>  Sand                    | <br>  Silt                | <br>  Clay                   |
|--------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|------------------------------------|-------------------------------|-----------------------------|---------------------------|-------------------------------|---------------------------|------------------------------|
| and soil name            |                               | <br>                                                                                                                                                                  |                              | inches                        | 4                                  | 10                            | 40                          | 200                       | -!<br>                        |                           |                              |
|                          | <br>  In.<br>                 | <br> <br>                                                                                                                                                             | <br>  Pct.<br>               | Pct.                          | <br> <br>                          |                               | <br> <br>                   | <br> <br>                 | Pct.                          | Pct.                      | Pct.                         |
| 603:<br>Kenai            | <br>   0-2<br>                | <br> Moderately decomposed<br>  plant material                                                                                                                        | <br> <br>                    | <br> <br>                     | <br> <br>                          | <br> <br>                     | <br> <br>                   | <br> <br>                 | <br> <br>                     | <br> <br>                 | <br> <br>                    |
|                          | j 6-19                        | Very fine sandy loam, silt loam<br>Very fine sandy loam, silt loam<br>Very fine sandy loam, loam,                                                                     |                              | 0<br>  0<br>  0               | 100<br>  100<br> 90-100            | 100<br>  100<br> 85-100       | 80-95<br> 80-95<br> 75-97   | 50-80<br> 50-80<br> 40-85 | 25-60<br> 25-60<br> 20-70     | 35-65<br> 35-65<br> 25-75 | 5-10<br>  5-10<br>  3-10     |
|                          |                               | silt loam<br> Silt loam, silty clay loam,<br>  gravelly loam                                                                                                          | <br>  0<br>                  | <br>  0<br>                   | <br> 85-100<br>                    | <br> 80-100<br>               | <br> 75-99<br>              | <br> 50-95<br>            | <br>  5-45<br>                | <br> 35-75<br>            | <br> 20-35<br>               |
| Starichkof               |                               | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand<br>                                                                                                | <br> <br> <br>               | <br> <br> <br>                | <br> <br> <br>                     |                               | <br>                        | <br> <br>                 |                               | <br>                      | <br> <br> <br>               |
| 604:<br>Kichatna         | <br>  0-2                     | <br> Slightly decomposed<br>  plant material                                                                                                                          | j<br>                        | <br>                          | <br>                               | <br>                          | <br>                        | j<br>                     | j<br>                         | j<br>                     | <br>                         |
|                          | 4-11                          | Silt loam, very fine sandy loam<br>  Silt loam, very fine sandy loam<br>  Very gravelly loamy coarse<br>  sand, very gravelly sandy loam                              | 0<br>0-5                     | 0-5                           | 90-100<br> 90-100<br> 40-75        | 85-100<br> 85-100<br> 35-70   | 80-100<br> 80-100<br> 20-40 | 70-90<br> 70-90<br> 10-20 | 20-60<br> 20-60<br> 65-85     | 30-70<br>30-70<br>12-25   | 5-15<br>  5-15<br>  3-10     |
|                          | <br> 14-60<br> <br> <br> <br> | Very gravelly sand, extremely   gravelly coarse sand,   extremely gravelly loamy   coarse sand, very gravelly   loamy sand                                            |                              | <br> 10-25<br> <br> <br> <br> | <br> 15-55<br> <br> <br> <br> <br> | <br> 10-50<br> <br> <br> <br> | 10-30<br> <br> <br> <br>    | 0-15                      | <br> 80-98<br> <br> <br> <br> | <br>  2-20<br> <br> <br>  | <br>  0-5<br> <br> <br> <br> |
| 605:<br>Kichatna         | 0-2                           | <br> <br> Slightly decomposed<br>  plant material                                                                                                                     | <br> <br> <br>               | <br> <br>                     | <br> <br>                          |                               | <br>                        | <br>                      |                               |                           | <br>                         |
|                          | 4-11                          | Silt loam, very fine sandy loam<br>Silt loam, very fine sandy loam<br>Very gravelly sandy loam, very<br>gravelly loamy coarse sand                                    | įο                           | 0-10<br>0-5<br>0-15           | 90-100<br> 90-100<br> 40-75        | 85-100<br> 85-100<br> 35-70   | 80-100<br> 80-100<br> 20-40 | 70-90<br>70-90<br>10-20   | 20-60<br> 20-60<br> 65-85     | 30-70<br>30-70<br>12-25   | 5-15<br>  5-15<br>  3-10     |
|                          | 14-60<br> <br> <br> <br>      | Very gravelly loamy sand, very<br>gravelly sand, extremely<br>gravelly loamy coarse sand,<br>extremely gravelly coarse<br>sand                                        | 0-5<br> <br> <br> <br>       | 10-25<br> <br> <br> <br>      | 15-55<br> <br> <br> <br> <br>      | 10-50<br> <br> <br> <br>      | 10-30<br> <br> <br> <br>    | 0-15                      | 80-98<br> <br> <br> <br>      | 2-20<br> <br> <br> <br>   | 0-5<br> <br> <br> <br>       |
| 606:<br>Kichatna         | 0-2                           | <br> <br> Slightly decomposed<br>  plant material                                                                                                                     | <br> <br>                    | <br> <br>                     | <br> <br>                          |                               |                             | <br>                      |                               |                           |                              |
|                          |                               | Silt loam, very fine sandy loam<br>  Silt loam, very fine sandy loam<br>  Very gravelly sandy loam, very<br>  gravelly loamy coarse sand                              | įο                           | 0-5                           |                                    |                               | 80-100<br> 80-100<br> 20-40 |                           | 20-60<br> 20-60<br> 65-85     | 30-70<br> 30-70<br> 12-25 |                              |
|                          | <br> 14-60<br> <br> <br> <br> | gravely loamy coarse sand<br> Extremely gravelly loamy<br>  coarse sand, extremely<br>  gravelly coarse sand, very<br>  gravelly sand, very gravelly<br>  loamy sand  | <br>  0-5<br> <br> <br> <br> | <br> 10-25<br> <br> <br> <br> | <br> 15-55<br> <br> <br> <br> <br> | <br> 10-50<br> <br> <br> <br> | 10-30                       | 0-15                      | 80-98<br> <br> <br> <br> <br> | 2-20                      | <br>  0-5<br> <br> <br>      |
| 607:<br>Kichatna         | 0-2                           | <br> <br> Slightly decomposed<br>  plant material                                                                                                                     | <br> <br>                    | <br>                          | <br>                               |                               |                             |                           |                               |                           |                              |
|                          |                               | Silt loam, very fine sandy loam<br>Silt loam, very fine sandy loam<br>Very gravelly sandy loam, very                                                                  | įο                           | 0-5                           | 90-100<br> 90-100<br> 40-75        | 85-100<br> 85-100<br> 35-70   | 80-100<br> 80-100<br> 20-40 | 70-90<br> 70-90<br> 10-20 | 20-60<br> 20-60<br> 65-85     | 30-70<br>30-70<br>12-25   | 5-15<br>  5-15<br>  3-10     |
|                          | <br> 14-60<br> <br> <br>      | gravelly loamy coarse sand<br> Extremely gravelly loamy<br>  coarse sand, extremely<br>  gravelly coarse sand, very<br>  gravelly sand, very gravelly<br>  loamy sand | <br>  0-5<br> <br> <br> <br> | <br> 10-25<br> <br> <br> <br> | <br> 15-55<br> <br> <br> <br>      | <br> 10-50<br> <br> <br> <br> | <br> 10-30<br> <br> <br>    | 0-15                      | <br> 80-98<br> <br> <br> <br> | <br> 2-20<br> <br> <br>   | <br>  0-5<br> <br> <br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol       | <br>  Depth                        | USDA texture                                                                                                                      | Fragn                        |                               |                                  | entage pa<br>e numbei        |                                |                               | <br>  Sand                     | <br>  Silt                    | <br>  Clay                       |
|------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|
| and soil name    | <br>                               |                                                                                                                                   | >10<br> inches               | 3-10<br> inches               |                                  | 10                           | 40                             | 200                           | - <br>                         |                               |                                  |
|                  | <br>  In.                          |                                                                                                                                   | Pct.                         | Pct.                          | <br>                             | <br>                         |                                |                               | Pct.                           | Pct.                          | Pct.                             |
| 608:<br>Kichatna | <br> <br> 0-2                      | <br> <br> Slightly decomposed                                                                                                     | <br> <br>                    | <br> <br>                     | <br> <br>                        | <br> <br>                    | <br> <br>                      | <br>                          | <br> <br>                      | <br> <br>                     | <br> <br>                        |
|                  | <br>  2-4                          | plant material<br> Silt loam, very fine sandy loam                                                                                | <br>  0                      | <br>  0-10                    | <br> 90-100                      | <br> 85-100                  | <br> 80-100                    | <br> 70-90                    | <br> 20-60                     | <br> 30-70                    | <br>  5-15                       |
|                  | 4-11                               | Silt loam, very fine sandy loam<br> Very gravelly sandy loam, very<br>  gravelly loamy coarse sand                                | 0                            | 0-5                           | 90-100<br> 40-75                 | 85-100<br> 35-70             | 80-100<br> 20-40               | 70-90<br> 10-20               | 20-60<br> 65-85                | 30-70                         | 5-15                             |
|                  | <br> 14-60<br> <br> <br> <br> <br> | Extremely gravelly loamy   coarse sand, extremely   gravelly coarse sand, very   gravelly loamy sand,   very gravelly sand        | <br>  0-5<br> <br> <br> <br> | <br> 10-25<br> <br> <br> <br> | <br> 15-55<br> <br> <br> <br>    | 10-50<br> <br> <br> <br>     | 10-30<br> <br> <br> <br> <br>  | 0-15<br> <br> <br> <br>       | 80-98<br> <br> <br> <br>       | <br>  2-20<br> <br> <br> <br> | <br>  0-5<br> <br> <br> <br>     |
| 609:<br>Kichatna | <br> <br> 0-2                      | <br> <br> Slightly decomposed                                                                                                     | <br> <br>                    | <br> <br>                     | <br> <br>                        | <br>                         | <br>                           | <br>                          |                                | <br>                          | <br>                             |
| Tionana          | İ                                  | plant material                                                                                                                    | i                            | İ                             |                                  |                              |                                |                               |                                |                               |                                  |
|                  | 4-11                               | Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Very gravelly loamy coarse<br>  sand, very gravelly sandy |                              | 0-5                           | 90-100<br> 90-100<br> 40-75<br>  | 85-100<br> 85-100<br> 35-70  | 80-100<br> 80-100<br> 20-40    | 70-90<br> 70-90<br> 10-20     | 20-60<br> 20-60<br> 65-85<br>  | 30-70<br> 30-70<br> 12-25<br> | 5-15<br>  5-15<br>  3-10<br>     |
|                  | <br> 14-60<br> <br> <br> <br>      | loam  Very gravelly sand, extremely   gravelly loamy coarse sand,   extremely gravelly coarse   sand, very gravelly loamy   sand  | <br>  0-5<br> <br> <br> <br> | <br> 10-25<br> <br> <br> <br> | <br> 15-55<br> <br> <br> <br>    | <br> 10-50<br> <br> <br>     | <br> 10-30<br> <br> <br> <br>  | <br>  0-15<br> <br> <br> <br> | <br> 80-98<br> <br> <br>       | <br>  2-20<br> <br> <br> <br> | <br>  0-5<br> <br> <br> <br>     |
| Killey           | 0-2                                | <br> Slightly decomposed<br>  plant material                                                                                      | <br>                         | <br>                          | <br>                             |                              |                                |                               |                                |                               |                                  |
|                  |                                    | Silt loam<br> Stratified fine sand to silt loam<br> Very gravelly sand, very<br>  gravelly coarse sand                            | <br>  0<br>  0<br>  0        | <br>  0<br>  0<br>  0-12<br>  | <br>  100<br>  100<br> 45-70<br> | 100<br> 90-100<br> 30-60     | 90-100<br> 70-80<br> 15-40     | 70-90<br> 30-45<br>  3-10     | 25-50<br> 25-100<br> 85-100    | 40-65<br>  0-70<br>  0-15     | <br>  5-10<br>  0-5<br>  0-5<br> |
| 610:             |                                    |                                                                                                                                   | <br> <br> -                  | <br>                          | <br>                             |                              |                                | ļ<br>                         |                                | <br>                          | <br>                             |
| Kidazqeni        | 4-21                               | Silt loam<br> Stratified sand to silt loam<br> Very cobbly sand, extremely<br>  gravelly sand, very gravelly<br>  sand            | 0<br>  0<br>  0<br> <br>     | 0<br>  0<br> 15-30<br>        | 100<br> 90-100<br> 60-75<br>     | 100<br> 75-100<br> 30-75<br> | 85-100<br> 60-85<br> 10-25<br> | 65-80<br> 12-80<br>  0-5<br>  | 20-50<br> 20-95<br> 85-100<br> | 50-70<br>  5-80<br>  0-10<br> | 0-10<br>  0-5<br>  0-5<br> <br>  |
| 611:<br>Killey   | <br> <br> 0-2                      | <br> <br> Slightly decomposed                                                                                                     | <br> <br>                    | <br> <br>                     | <br> <br>                        |                              |                                |                               |                                | <br> <br>                     | <br> <br>                        |
| Talley           | 2-6                                | plant material<br> Silt loam                                                                                                      | <br> <br>  0                 | <br> <br>  0                  | <br> <br>  100                   | 100                          | 90-100                         | <br> <br> 70-90               | <br> 25-50                     | <br> <br> 40-65               | <br> <br> 5-10                   |
|                  | 6-29<br> 29-60<br>                 | Stratified fine sand to silt loam<br> Very gravelly sand, very<br>  gravelly coarse sand                                          | 0<br>  0<br>                 | 0<br>  0-12<br>               | 100<br> 45-70<br>                | 90-100<br> 30-60<br>         | 70-80<br> 15-40<br>            | 30-45<br>  3-10<br>           | 25-100<br> 85-100<br>          | 0-70<br>  0-15<br>            | 0-5<br>  0-5<br>                 |
| Moose River      | 0-5                                | <br> Slightly decomposed<br>  plant material                                                                                      | <br>                         | <br>                          | <br>                             |                              |                                |                               |                                |                               |                                  |
|                  |                                    | Silt loam<br>  Stratified gravelly fine sand<br>  to silt loam, stratified fine<br>  sand to silt loam to slightly                | <br>  0<br>  0<br>           | <br>  0<br>  0<br>            | <br>  100<br> 70-100<br>         | 100<br> 50-100<br>           | 90-100<br> 37-95<br>           | <br> 70-90<br> 11-65<br>      | <br> 25-45<br> 40-95<br>       | <br> 50-70<br> 10-55<br>      | <br>  3-7<br>  3-8<br>           |
|                  | <br> 39-60                         | decomposed plant material Very gravelly sand                                                                                      | <br>  0                      | <br> 15-25<br>                | <br> 60-85<br>                   | <br> 40-75                   | <br> 30-50                     | 3-9                           | <br> 90-96                     | 2-10                          | <br>  0-2                        |
| 612:<br>Liten    | <br> <br> 0-2                      | <br> <br> Slightly decomposed<br>  plant material                                                                                 | <br> <br>                    | <br> <br>                     | <br> <br>                        |                              |                                |                               |                                | <br> <br>                     | <br> <br>                        |
|                  | 2-8                                | Very fine sandy loam, fine<br>  sandy loam, silt loam                                                                             | 0                            | 0                             | 100                              | 100                          | 90-100                         | 65-85                         | 20-60                          | 40-75                         | 0-10                             |
|                  | <br>  8-60<br>                     | sandy loam, slit loam<br> Sand, loamy sand<br>                                                                                    | <br>  0<br>                  | <br>  0-6<br>                 | <br>  100<br>                    | 100                          | <br> 65-75<br>                 | <br>  7-20                    | <br> 80-95<br>                 | <br> 5-15<br>                 | <br>  0-5                        |

Table 9. Engineering Sieve Data—Continued

| Map symbol                  | <br>  Depth         | USDA texture                                                                                                                                                                                                             | Fragn               |                                     |                                                         | entage pa<br>e number                 |                                         |                                               | <br>  Sand                              | <br>  Silt                              | Clay                                     |
|-----------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------|---------------------------------------------------------|---------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------------|
| and soil name               | <br> <br>           |                                                                                                                                                                                                                          | >10<br> inches      | 3-10<br> inches                     | <br>  4                                                 | 10                                    | 40                                      | 200                                           | - <br>                                  |                                         | <br> <br>                                |
|                             | <br>  In.<br>       |                                                                                                                                                                                                                          | Pct.                | <br>  Pct.                          | <br> <br>                                               | <br> <br>                             | <br> <br>                               | ·  <br> <br>                                  | Pct.                                    | Pct.                                    | Pct.                                     |
| 613:<br>Lithic Haplocryands | <br>  0-2<br> <br>  | Slightly decomposed   plant material, moderately   decomposed plant material, highly decomposed plant                                                                                                                    | <br> <br> <br> <br> | <br> <br> <br> <br>                 | <br> <br> <br> <br>                                     |                                       | <br> <br>                               | <br> <br> <br>                                | <br> <br> <br>                          | <br> <br> <br>                          | <br> <br> <br>                           |
|                             | <br>  2-12<br> <br> | material<br> Gravelly silt loam, gravelly<br>  very fine sandy loam, silt<br>  loam, very gravelly silt loam                                                                                                             | <br>  0<br>         | <br>  0-15<br> <br>                 | <br> 35-75<br> <br>                                     | <br> 20-70<br>                        | <br> 15-60<br>                          | <br> 13-50<br>                                | <br> 30-55<br>                          | <br> 45-65<br>                          | <br>  0-10<br>                           |
|                             | 12-60               | Bedrock                                                                                                                                                                                                                  | <br> <br>           | <br>                                | <br>                                                    | ļ                                     | ļ                                       |                                               |                                         |                                         | <br>                                     |
| Alic Haplocryands           | 0-4                 | Moderately decomposed<br>  plant material                                                                                                                                                                                | j<br>i              | <br> <br>                           | j<br>i                                                  | j                                     | j                                       | j                                             | ļ                                       | ļ                                       | <br>                                     |
|                             | 4-21                | Very gravelly very fine<br>  sandy loam, silt loam                                                                                                                                                                       | i 0                 | 0-10                                | 50-100                                                  | 35-100                                | 30-95                                   | 20-85                                         | 25-65                                   | 30-65                                   | 0-10                                     |
|                             | 21-31<br> <br>      | Gravelly fine sandy loam, silt<br>  loam, very gravelly sandy<br>  loam                                                                                                                                                  | 0-6<br> <br>        | 0-10                                | 50-90<br> <br>                                          | 35-85                                 | 25-70                                   | 20-65                                         | 40-65<br>                               | 30-55                                   | 0-10                                     |
|                             | 31-60               | Bedrock                                                                                                                                                                                                                  | ļ                   | ļ                                   | ļ                                                       | ļ                                     | ļ                                       | ļ                                             | ļ                                       | ļ                                       |                                          |
| Rock outcrop                | ļ                   |                                                                                                                                                                                                                          | ļ                   | <br>                                | ļ                                                       |                                       |                                         |                                               | ļ                                       | ļ                                       | İ                                        |
| 614:<br>Lithic Haplocryands | <br> 0-2<br>        | <br> Moderately decomposed plant<br>  material, highly decomposed<br>  plant material, slightly                                                                                                                          | <br> <br>           | <br> <br>                           | <br> <br> <br>                                          | <br> <br>                             | <br> <br>                               | <br> <br>                                     |                                         |                                         | <br> <br> <br>                           |
|                             | <br>  2-12<br>      | decomposed plant material<br> Silt loam, very gravelly silt<br>  loam, gravelly very fine sandy<br>  loam, gravelly silt loam                                                                                            | <br>  0<br>         | <br>  0-15<br>                      | <br> 35-75<br> <br>                                     | <br> 20-70<br>                        | <br> 15-60<br>                          | <br> 13-50<br>                                | <br> 30-55<br>                          | <br> 45-65<br>                          | 0-10                                     |
|                             | 12-60               | Bedrock                                                                                                                                                                                                                  |                     | ļ                                   | ļ                                                       |                                       |                                         |                                               |                                         |                                         |                                          |
| Alic Haplocryands           | <br>  0-4<br>       | <br> Moderately decomposed<br>  plant material                                                                                                                                                                           | <br> <br>           | <br> <br>                           | <br> <br>                                               |                                       |                                         |                                               |                                         |                                         |                                          |
|                             | 4-21                | Silt loam, very gravelly<br>  very fine sandy loam                                                                                                                                                                       | 0                   | 0-10                                | 50-100                                                  | 35-100                                | 30-95                                   | 20-85                                         | 25-65                                   | 30-65                                   | 0-10                                     |
|                             | 21-31<br>           | Gravelly fine sandy loam,<br>  silt loam, very gravelly sandy<br>  loam                                                                                                                                                  | 0-6<br>             | 0-10                                | 50-90<br> <br>                                          | 35-85                                 | 25-70                                   | 20-65                                         | 40-65<br>                               | 30-55                                   | 0-10                                     |
|                             | 31-60               | Bedrock                                                                                                                                                                                                                  | ļ                   | ļ                                   |                                                         |                                       |                                         |                                               |                                         |                                         |                                          |
| Rock outcrop                |                     |                                                                                                                                                                                                                          |                     | <br> <br>                           |                                                         |                                       |                                         |                                               |                                         |                                         |                                          |
| 615:<br>Longmare            | 0-3                 | <br> <br> Moderately decomposed<br>  plant material                                                                                                                                                                      | <br> <br>           | <br> <br>                           | <br>                                                    |                                       | <br>                                    |                                               |                                         |                                         |                                          |
|                             | 6-18<br> 18-29      | Silt loam, very fine sandy loam  Very fine sandy loam, silt loam  Very fine sandy loam, silt loam  Very fine sandy loam, silt loam  Gravelly loamy sand,   stratified gravelly   sand to silt loam,   sand, loamy sand   | įο                  | 0<br>  0<br>  0<br>  0-15<br> <br>  | 100<br>  100<br>  100<br>  100<br> 65-100<br> <br> <br> | 100<br>  100<br>  100<br>  55-100<br> | 80-90<br> 80-90<br> 80-90<br> 35-80<br> | 45-75<br> 45-75<br> 45-75<br> 4-55<br>        | 30-65<br> 30-65<br> 30-65<br> 45-95<br> | 35-65<br> 35-65<br> 35-65<br>  5-55<br> | 0-5<br>0-5<br>0-5<br>0-5<br>0-5          |
| 616:<br>Longmare            | <br>  0-3<br>       | <br> Moderately decomposed<br>  plant material                                                                                                                                                                           | <br> <br>           | <br> <br>                           | <br> <br>                                               | <br>                                  | <br>                                    |                                               | <br>                                    | <br>                                    | <br>                                     |
|                             | 6-18<br> 18-29      | Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Gravelly loamy sand, stratified   gravelly sand to silt loam,   sand, loamy sand | 0<br>  0            | <br>  0<br>  0<br>  0<br>  0-15<br> | <br>  100<br>  100<br>  100<br> 65-100<br>              | 100<br>  100<br>  100<br>  55-100     | 80-90<br> 80-90<br> 80-90<br> 35-80     | 45-75<br> 45-75<br> 45-75<br> 45-75<br>  4-55 | 30-65<br> 30-65<br> 30-65<br> 45-95     | 35-65<br> 35-65<br> 35-65<br> 5-55<br>  | <br>  0-5<br>  0-5<br>  0-5<br>  0-5<br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | Depth                    | USDA texture                                                                                                                                              | Fragn<br> <br>  >10     | nents<br>  3-10            |                           | entage pa<br>e numbei     |                          |                          | <br>  Sand               | <br>  Silt               | <br>  Clay              |
|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| and soil name            |                          |                                                                                                                                                           | inches                  |                            | 4                         | 10                        | 40                       | 200                      | - <br>                   |                          |                         |
|                          | <br>  In.                |                                                                                                                                                           | Pct.                    | <br>  Pct.                 | <br> <br>                 |                           |                          | <br> <br>                | Pct.                     | Pct.                     | Pct.                    |
| 617:                     |                          |                                                                                                                                                           | !<br>!                  |                            |                           |                           |                          |                          |                          |                          |                         |
| Mutnala                  | 0-4<br>                  | Moderately decomposed<br>  plant material                                                                                                                 | <br>                    | <br>                       | <br>                      | <br>                      | <br>                     |                          |                          |                          |                         |
|                          | 4-7<br>                  | Very fine sandy loam, mucky<br>  silt loam, silt loam                                                                                                     | 0<br>                   | 0<br>                      | 100<br>                   | 100<br>                   | 85-95<br>                | 45-80<br>                | 25-65<br>                | 35-65<br>                | 0-10<br>                |
|                          |                          | Silt loam, very fine sandy loam<br> Gravelly sandy loam, silt<br>  loam, cobbly fine sandy loam,<br>  very fine sandy loam                                | 0<br>  0<br> <br>       | 0<br> 0-15<br> <br>        | 70-100<br> 65-95<br> <br> | 60-100<br> 50-90<br>      | 55-95<br> 40-80<br>      | 25-80<br> 20-65<br>      | 25-65<br> 30-65<br>      | 35-65<br> 30-65<br>      | 0-10<br>  5-15<br> <br> |
| 618:                     |                          | <br>                                                                                                                                                      | <u> </u>                | <u> </u>                   | <u> </u>                  |                           |                          |                          |                          |                          |                         |
| Mutnala                  | 0-4                      | Moderately decomposed<br>  plant material                                                                                                                 | ļ                       | ļ                          | ļ                         | ļ                         | ļ                        |                          |                          | ļ                        |                         |
|                          | <br>  4-7<br>            | Mucky silt loam, silt loam,<br>  very fine sandy loam                                                                                                     | <br>  0<br>             | <br>  0<br>                | <br>  100<br>             | 100                       | <br> 85-95<br>           | <br> 45-80<br>           | <br> 25-65<br>           | <br> 35-65<br>           | 0-10                    |
|                          | 7-23<br> 23-60<br>       | Silt loam, very fine sandy loam<br> Silt loam, cobbly fine sandy<br>  loam, very fine sandy loam,<br>  gravelly sandy loam                                | 0<br>  0<br> <br>       | 0<br>  0-15<br>            | 70-100<br> 65-95<br>      | 60-100<br> 50-90<br>      | 55-95<br> 40-80<br>      | 25-80<br> 20-65<br>      | 25-65<br> 30-65<br>      | 35-65<br>30-65           | 0-10<br>  5-15<br>      |
| 619:                     |                          | <br>                                                                                                                                                      | <br>                    | <br>                       | <br>                      | <br>                      |                          |                          |                          |                          | <br>                    |
| Mutnala                  | 0-4<br>                  | Moderately decomposed<br>  plant material                                                                                                                 | <br>                    | <br>                       | <br>                      |                           |                          |                          |                          |                          |                         |
|                          | 4-7                      | Very fine sandy loam,                                                                                                                                     | 0                       | 0                          | 100                       | 100                       | 85-95                    | 45-80                    | 25-65                    | 35-65                    | 0-10                    |
|                          | <br>  7-23               | mucky silt loam, silt loam<br> Silt loam, very fine<br>  sandy loam                                                                                       | <br>  0<br>             | <br>  0<br>                | <br> 70-100<br>           | <br> 60-100               | <br> 55-95<br>           | <br> 25-80<br>           | <br> 25-65<br>           | <br> 35-65               | 0-10                    |
|                          | 23-60                    | Cobbly fine sandy loam, silt   loam, very fine sandy loam,   gravelly sandy loam                                                                          | 0<br> <br>              | 0-15<br> <br>              | <br> 65-95<br> <br>       | 50-90                     | 40-80<br>                | 20-65                    | 30-65                    | 30-65                    | 5-15                    |
| 620:                     | <br>                     | <br>                                                                                                                                                      | <br>                    | !<br>!                     | <br>                      | ļ                         |                          | ļ                        |                          |                          | ļ                       |
| Mutnala                  | 0-4<br>                  | Moderately decomposed<br>  plant material                                                                                                                 | <br>                    | <br>                       | <br>                      |                           | <br>                     |                          |                          |                          |                         |
|                          | 4-7                      | Very fine sandy loam,<br>mucky silt loam, silt loam                                                                                                       | 0                       | 0                          | 100                       | 100                       | 85-95                    | 45-80                    | 25-65                    | 35-65                    | 0-10                    |
|                          | <br>  7-23<br> 23-60<br> | Trideky silt loath, silt loath<br> Very fine sandy loam, cobbly<br>  fine sandy loam, gravelly<br>  sandy loam, silt loam                                 | <br>  0<br>  0<br>      | <br>  0<br>  0-15<br>      | <br> 70-100<br> 65-95<br> | 60-100<br> 50-90<br>      | 55-95<br> 40-80<br>      | 25-80<br> 20-65<br>      | <br> 25-65<br> 30-65<br> | 35-65<br> 30-65<br>      | <br> 0-10<br> 5-15<br>  |
| 621:                     | <br> <br>  0-4           | <br> <br> Madarataly decomposed                                                                                                                           | <br>                    | <br>                       | <br>                      |                           |                          |                          |                          |                          | <br>                    |
| Mutnala                  | 0-4<br> <br>  4-7        | Moderately decomposed<br>  plant material<br> Silt loam, mucky silt                                                                                       | <br> <br>  0            | <del></del><br> <br>  0    | <br> <br>  100            | <br> <br>  100            | <br> <br> 85-95          | <br> <br> 45-80          | <br> <br> 25-65          | <br> <br> 35-65          | <br> <br>  0-10         |
|                          | İ                        | loam, very fine sandy loam                                                                                                                                | İ                       | İ                          | İ                         | j                         | İ                        | İ                        | İ                        | İ                        | İ                       |
|                          |                          | Silt loam, very fine sandy loam<br> Gravelly sandy loam, very fine<br>  sandy loam, cobbly fine<br>  sandy loam, silt loam                                |                         | 0<br> 0-15<br> <br>        | 70-100<br> 65-95<br> <br> | 60-100<br> 50-90<br>      | 55-95<br> 40-80<br> <br> | 25-80<br> 20-65<br> <br> | 25-65<br> 30-65<br>      | 35-65<br> 30-65<br> <br> |                         |
| 622:<br>Mutnala          | 0-4                      | <br> <br> Moderately decomposed                                                                                                                           | <br> <br>               | <br> <br>                  | <br> <br>                 |                           | <br> <br>                |                          |                          |                          | <br>                    |
|                          | 4-7                      | plant material<br> Very fine sandy loam,                                                                                                                  | i<br>i 0                | <br>  0                    | 100                       | 100                       | <br> 85-95               | <br> 45-80               | <br> 25-65               | <br> 35-65               | 0-10                    |
|                          | <br>  7-23<br> 23-60<br> | mucky silt loam, silt loam<br> Silt loam, very fine sandy loam<br> Gravelly sandy loam, very<br>  fine sandy loam, cobbly<br>  fine sandy loam, silt loam | <br>  0<br>  0<br> <br> | <br>  0<br>  0-15<br> <br> | <br> 70-100<br> 65-95<br> | <br> 60-100<br> 50-90<br> | <br> 55-95<br> 40-80<br> | <br> 25-80<br> 20-65<br> | <br> 25-65<br> 30-65<br> | <br> 35-65<br> 30-65<br> | <br> 0-10<br> 5-15<br>  |

Table 9. Engineering Sieve Data—Continued

| Map symbol       | <br>  Depth              | USDA texture                                                                                                                                                                                                                                                                                 | Fragm                       |                                             |                                                            | entage pa<br>e numbei                               |                                                    |                                                 | <br>  Sand                                         | <br>  Silt                                        | <br>  Clay                                            |
|------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------|------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------|-------------------------------------------------|----------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|
| and soil name    |                          | <br>                                                                                                                                                                                                                                                                                         | >10<br> inches              | 3-10<br> inches                             | <br>  4                                                    | 10                                                  | 40                                                 | 200                                             | _[<br> <br>                                        |                                                   | <br> <br>                                             |
|                  | <br>  In.                |                                                                                                                                                                                                                                                                                              | Pct.                        | Pct.                                        | <br>                                                       |                                                     |                                                    |                                                 | Pct.                                               | Pct.                                              | Pct.                                                  |
| 623:             |                          |                                                                                                                                                                                                                                                                                              |                             |                                             |                                                            |                                                     |                                                    |                                                 |                                                    |                                                   |                                                       |
| Mutnala          | ·  0-4<br>               | Moderately decomposed<br>  plant material                                                                                                                                                                                                                                                    | <br>                        | <br>                                        | <br>                                                       | <br>                                                | <br>                                               |                                                 |                                                    |                                                   | <br>                                                  |
|                  | 4-7<br>                  | Silt loam, mucky silt<br>  loam, very fine sandy loam                                                                                                                                                                                                                                        | 0<br>                       | 0<br>                                       | 100<br>                                                    | 100<br>                                             | 85 <b>-</b> 95<br>                                 | 45-80<br>                                       | 25-65<br>                                          | 35-65<br>                                         | 0-10<br>                                              |
|                  |                          | Silt loam, very fine sandy loam<br> Gravelly sandy loam, very<br>  fine sandy loam, cobbly<br>  fine sandy loam, silt loam                                                                                                                                                                   | 0<br>  0<br> <br>           | 0<br>  0-15<br> <br>                        | 70-100<br> 65-95<br> <br>                                  | 60-100<br> 50-90<br>                                | 55-95<br> 40-80<br>                                | 25-80<br> 20-65<br>                             | 25-65<br> 30-65<br>                                | 35-65<br>30-65<br>                                | 0-10<br>  5-15<br> <br>                               |
| Starichkof       |                          | Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                                                | <br> <br>                   | <br> <br>                                   | <br> <br>                                                  | <br>                                                | <br>                                               |                                                 | <br>                                               | <br>                                              | <br> <br>                                             |
| Slikok           | <br>·  0-13              | <br> Peat                                                                                                                                                                                                                                                                                    | <br>                        | <br>                                        | <br>                                                       | <br>                                                | <br>                                               |                                                 |                                                    |                                                   |                                                       |
|                  |                          | Mucky silt loam, silt loam<br> Fine sandy loam, silt loam,<br>  very gravelly sandy loam,<br>  gravelly silt loam, gravelly<br>  fine sandy loam                                                                                                                                             | 0<br>  0<br> <br> <br> <br> | 0<br>  0-15<br> <br> <br> <br>              | 100<br> 55-90<br> <br> <br> <br>                           | 100<br> 50-85<br> <br> <br>                         | 90-97<br> 50-80<br> <br> <br>                      | 70-85<br> 30-70<br> <br> <br> <br>              | 20-45<br> 20-55<br> <br> <br> <br>                 | 50-75<br> 40-70<br> <br> <br> <br>                | 5-10<br>  0-10<br> <br> <br>                          |
| 624:<br>Naptowne | <br>-  0-3               | <br> Slightly decomposed                                                                                                                                                                                                                                                                     | <br>                        | <br>                                        | <br>                                                       | <br>                                                | <br>                                               |                                                 |                                                    |                                                   |                                                       |
| , rupio me       | <br> <br> 3-14<br> 13-20 | plant material, moderately decomposed plant material Silt loam, very fine sandy loam Silt loam, very fine sandy loam Very cobbly silt loam, very gravelly sandy loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand             | <br> <br>  0<br>  0         | <br>  0<br>  0<br>  0-40<br> <br>           | <br>   <br> 85-100<br> 85-100<br> 50-85<br> <br>           | <br> 80-100<br> 80-100<br> 35-75<br> <br>           | <br>  75-95<br> 75-95<br> 30-70<br> <br> <br>      | <br> 40-75<br> 45-75<br> 10-45<br>              | <br> 20-50<br> 20-50<br> 40-85<br>                 | <br> 45-75<br> 45-75<br> 10-55<br>                | <br>  3-10<br>  3-10<br>  0-5<br> <br> <br>           |
| 625:<br>Naptowne |                          | <br> <br> Moderately decomposed                                                                                                                                                                                                                                                              | <br> <br>                   | !<br> <br>                                  |                                                            |                                                     |                                                    |                                                 |                                                    |                                                   |                                                       |
| марюwне          | <br> <br> 3-14<br> 13-20 | plant material, slightly   decomposed plant material  Very fine sandy loam, silt loam  Very fine sandy loam, silt loam  Very gravelly sandy loam,   gravelly very fine sandy   loam, gravelly loamy sand,  very gravelly silt loam, very   cobbly silt loam, very gravelly   fine sandy loam | <br> <br>  0<br>  0         | <br> <br>  0<br>  0<br>  0-40<br> <br> <br> | <br> <br>   <br> 85-100<br> 85-100<br> 50-85<br> <br> <br> | <br> <br>   <br>                   <br>             | <br> <br>      75-95<br>    75-95<br>    30-70<br> | <br> <br>  40-75<br>  45-75<br>  10-45<br> <br> | <br> <br>   20-50<br>   20-50<br>   40-85<br> <br> | <br> <br> 45-75<br> 45-75<br> 10-55<br> <br> <br> | <br> <br>  3-10<br>  3-10<br>  0-5<br> <br> <br> <br> |
| 626:<br>Naptowne | <br> <br> 3-14<br> 13-20 |                                                                                                                                                                                                                                                                                              |                             | <br> <br>  0<br>  0<br>  0-40<br>           | <br> <br> <br> 85-100<br> 85-100<br> 50-85<br> <br>        | <br> <br> <br> 80-100<br> 80-100<br> 35-75<br> <br> | <br> <br> <br> 75-95<br> 75-95<br> 30-70<br> <br>  | <br> <br> <br> 40-75<br> 45-75<br> 10-45<br>    | <br> <br> <br> 20-50<br> 20-50<br> 40-85<br>       | <br> <br> <br> 45-75<br> 45-75<br> 10-55<br>      | 3-10                                                  |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name     | Depth                                   | <br>  USDA texture<br>                                                                                                                                                                                                                                                                               | Fragn<br> <br>  >10                    | 3-10                                        |                                                          | entage pa<br>e number                                    |                                                        |                                              | <br>  Sand                              | <br>  Silt                                   | <br>  Clay                                       |
|------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|----------------------------------------------|-----------------------------------------|----------------------------------------------|--------------------------------------------------|
| anu sun name                 |                                         | <br> <br>                                                                                                                                                                                                                                                                                            | > 10<br> inches                        |                                             | 4                                                        | 10                                                       | 40                                                     | 200                                          | - <br> <br>                             |                                              |                                                  |
|                              | <br>  In.                               |                                                                                                                                                                                                                                                                                                      | <br>  Pct.                             | <br>  Pct.                                  | <br> <br>                                                |                                                          |                                                        |                                              | Pct.                                    | Pct.                                         | Pct.                                             |
| 627:<br>Naptowne             | <br> 0-3<br>                            | <br> Slightly decomposed plant<br>  material, moderately                                                                                                                                                                                                                                             | <br> <br>                              | <br> <br> <br>                              | <br> <br>                                                | <br>                                                     | <br>                                                   | <br> <br>                                    | <br> <br>                               |                                              | <br> <br>                                        |
|                              | 13-20                                   | decomposed plant material   Very fine sandy loam, silt loam   Very fine sandy loam, silt loam   Gravelly loamy sand, very   gravelly silt loam, very   gravelly fine sandy loam,   gravelly very fine sandy loam,   very cobbly silt loam, very   gravelly sandy loam                                | 0<br>  0-15<br> <br>                   | <br>  0<br>  0<br>  0-40<br> <br> <br> <br> | <br> 85-100<br> 85-100<br> 50-85<br> <br> <br> <br>      | <br> 80-100<br> 80-100<br> 35-75<br> <br> <br>           | <br> 75-95<br> 75-95<br> 30-70<br> <br> <br> <br>      | 40-75<br> 45-75<br> 10-45<br>                | 20-50<br> 20-50<br> 40-85<br> <br>      | <br> 45-75<br> 45-75<br> 10-55<br> <br> <br> | <br> 3-10<br> 3-10<br> 0-5<br> <br> <br> <br>    |
| 628:<br>Naptowne             | 0-3                                     | <br> <br> Slightly decomposed                                                                                                                                                                                                                                                                        | <br>                                   | <br>                                        | <br>                                                     | <br>                                                     | <br>                                                   |                                              | <br>                                    | <br>                                         | <br>                                             |
|                              | 13-20                                   | plant material, moderately<br>  decomposed plant material<br> Silt loam, very fine sandy loam<br> Very fine sandy loam, silt loam<br> Gravelly loamy sand, very<br>  gravelly silt loam, very<br>  gravelly fine sandy loam,<br>  very cobbly silt loam, very<br>  gravelly sandy loam               |                                        | <br>  0<br>  0<br>  0-40<br>                | <br> <br> 85-100<br> 85-100<br> 50-85<br> <br>           | <br>  80-100<br> 80-100<br> 35-75<br> <br>               |                                                        | <br> 40-75<br> 45-75<br> 10-45<br>           | <br> 20-50<br> 20-50<br> 40-85<br> <br> | <br> 45-75<br> 45-75<br> 10-55<br>           | <br> 3-10<br> 3-10<br> 0-5<br> <br>              |
| 629:                         |                                         | graverry saridy loann<br> <br> -                                                                                                                                                                                                                                                                     | <br> <br>                              | <br> <br>                                   | !<br> <br>                                               |                                                          |                                                        |                                              |                                         |                                              |                                                  |
| Naptowne                     | <br> <br>  3-14<br> 13-20               | Slightly decomposed plant material, moderately decomposed plant material Silt loam, very fine sandy loam Silt loam, very fine sandy loam Very gravelly fine sandy loam, very cobbly silt loam, very gravelly sandy loam, gravelly loamy sand, very gravelly silt loam, gravelly very fine sandy loam | įο                                     | <br> <br>  0<br>  0<br>  0-40<br> <br>      | <br> <br> <br> 85-100<br> 85-100<br> 50-85<br> <br> <br> | <br> <br> <br> 80-100<br> 80-100<br> 35-75<br> <br> <br> | <br> <br> <br> 75-95<br> 75-95<br> 30-70<br> <br> <br> | <br>  40-75<br>  45-75<br>  10-45<br>        | <br>  20-50<br>  20-50<br>  40-85<br>   | <br> <br> <br> 45-75<br> 45-75<br> 10-55<br> | <br> <br>  3-10<br>  3-10<br>  0-5<br> <br> <br> |
| 630:<br>Naptowne, moderately | 0-3                                     | <br> Slightly decomposed                                                                                                                                                                                                                                                                             | j<br>                                  | <br>                                        | j<br>                                                    | <br>                                                     | <br>                                                   | j<br>                                        | j<br>                                   | ļ<br>                                        | ļ<br>                                            |
| steep                        | 13-20                                   | plant material, moderately   decomposed plant material   Very fine sandy loam, silt loam   Silt loam, very fine sandy loam   Gravelly loamy sand, very   gravelly silt loam, gravelly   very fine sandy loam, very   gravelly sandy loam, very   cobbly silt loam, very gravelly   fine sandy loam   |                                        | <br>  0<br>  0<br>  0-40<br> <br> <br>      |                                                          | <br> 80-100<br> 80-100<br> 35-75<br> <br> <br>           |                                                        | <br> 40-75<br> 45-75<br> 10-45<br> <br> <br> | <br> 20-50<br> 20-50<br> 40-85<br> <br> | <br> 45-75<br> 45-75<br> 10-55<br> <br>      | 3-10                                             |
| Naptowne, strongly sloping   | 13-20                                   |                                                                                                                                                                                                                                                                                                      | įο                                     | <br> <br> <br> <br>  0<br>  0               | 85-100                                                   | <br> <br> <br> <br> 80-100<br> 80-100                    | 75-95                                                  | <br> <br> <br> 40-75<br> 45-75               | <br> <br> <br> 20-50<br> 20-50          | <br> <br> <br> <br> 45-75<br> 45-75          | <br> <br> <br> 3-10                              |
|                              | 20-60<br> <br> <br> <br> <br> <br> <br> | Gravelly loamy sand, very<br>  gravelly silt loam, very<br>  gravelly fine sandy loam,<br>  gravelly very fine<br>  sandy loam, very<br>  cobbly silt loam, very<br>  gravelly sandy loam                                                                                                            | 0-15<br> <br> <br> <br> <br> <br> <br> | 0-40<br> <br> <br> <br> <br> <br>           | 50-85<br> <br> <br> <br> <br> <br> <br>                  | 35-75<br> <br> <br> <br> <br> <br> <br>                  | 30-70<br> <br> <br> <br> <br> <br> <br>                | 10-45<br> <br> <br> <br> <br> <br> <br>      | 40-85<br> <br> <br> <br> <br> <br> <br> | 10-55<br> <br> <br> <br> <br> <br> <br>      | 0-5<br> <br> <br> <br> <br> <br> <br>            |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name              | Depth   USDA texture     >1        | USDA texture                                                                                                                                                                                                                                                                                                                         | Fragn                              | nents                              |                                                         | entage pa<br>e number                             |                                                          |                                    | <br>  Sand                              | <br>  Silt                                        | <br>  Clay                                       |
|---------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|---------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------|------------------------------------|-----------------------------------------|---------------------------------------------------|--------------------------------------------------|
| and son name                          |                                    | <br> <br> -                                                                                                                                                                                                                                                                                                                          |                                    | inches                             | 4                                                       | 10                                                | 40                                                       | 200                                | -                                       |                                                   |                                                  |
|                                       | <br>  In.                          |                                                                                                                                                                                                                                                                                                                                      | Pct.                               | Pct.                               | <br>                                                    | ļ                                                 | <br>                                                     | <br>                               | Pct.                                    | Pct.                                              | Pct.                                             |
| 631:<br>Naptowne, strongly<br>sloping | <br> <br> 0-3<br>                  | <br> <br> Slightly decomposed<br>  plant material, moderately                                                                                                                                                                                                                                                                        | <br> <br> <br>                     | <br> <br> <br>                     | <br> <br> <br>                                          | <br> <br>                                         | <br> <br>                                                | <br> <br>                          | <br> <br>                               | <br> <br>                                         | <br> <br> <br>                                   |
|                                       | 13-20                              | decomposed plant material<br> Silt loam, very fine sandy loam<br> Silt loam, very fine sandy loam<br> Very gravelly sandy loam, very<br>  cobbly silt loam, gravelly<br>  very fine sandy loam, very<br>  gravelly fine sandy loam, very<br>  gravelly silt loam, gravelly<br>  loamy sand                                           | 0<br>  0-15<br> <br>               | įο                                 |                                                         | <br> 80-100<br> 80-100<br> 35-75<br> <br> <br>    | <br> 75-95<br> 75-95<br> 30-70<br> <br> <br> <br>        | <br> 40-75<br> 45-75<br> 10-45<br> | 20-50<br> 20-50<br> 40-85<br>           | <br> 45-75<br> 45-75<br> 10-55<br> <br> <br> <br> | <br>  3-10<br>  3-10<br>  0-5<br> <br> <br> <br> |
| Naptowne, gently sloping              | 13-20                              | Moderately decomposed plant material, slightly decomposed plant material Silt loam, very fine sandy loam Silt loam, very fine sandy loam Very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, loam, loam gravelly loamy sand, gravelly loamy sand, gravelly very fine sandy loam |                                    | j o                                | <br>   <br>   <br> 85-100<br> 85-100<br> 50-85<br> <br> | <br> <br>  80-100<br>  80-100<br>  35-75<br> <br> | <br> <br>   <br> 75-95<br> 75-95<br> 30-70<br> <br> <br> | <br>  40-75<br>  45-75<br>  10-45  | <br> <br> 20-50<br> 20-50<br> 40-85<br> | <br> <br>  45-75<br> 45-75<br> 10-55<br> <br>     | <br> <br>  3-10<br>  3-10<br>  0-5<br>           |
| 632:<br>Niklason                      | <br> <br> 0-2                      | <br> <br> Moderately decomposed                                                                                                                                                                                                                                                                                                      | <br> <br>                          | <br> <br>                          | <br>                                                    | <br>                                              |                                                          |                                    |                                         | <br>                                              | <br>                                             |
|                                       | <br>  2-6<br>  6-23<br>            | plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, fine<br>  sandy loam, stratified sand<br>  to silt loam, loamy sand,                                                                                                                                                                                    | <br>  0<br>  0<br>                 | <br>  0<br>  0<br>                 | <br>  100<br>  100<br>                                  | <br>  100<br>  100<br>                            | <br> 85-95<br> 60-90<br>                                 | <br> 45-75<br>  9-80<br>           | <br> 30-60<br> 20-100<br>               | <br> 35-70<br>  0-80<br>                          | <br>  0-7<br>  0-5<br>                           |
|                                       | <br> 23-60<br> <br>                | sandy loam, silt loam Very gravelly sand, extremely gravelly sand, very gravelly loamy sand                                                                                                                                                                                                                                          | <br>  0<br> <br>                   | <br>  0-30<br> <br>                | <br> 35-65<br> <br>                                     | <br> 20-50<br> <br>                               | <br> 15-45<br> <br>                                      | <br>  1-15<br> <br>                | <br> 80-95<br> <br>                     | <br> 5-15<br> <br>                                | <br>  0-5<br> <br>                               |
| 633:<br>Nikolaevsk                    | <br> <br> 0-2                      | i<br> <br> Slightly decomposed                                                                                                                                                                                                                                                                                                       | <br> <br>                          | <br> <br>                          | <br> <br>                                               | <br>                                              |                                                          |                                    |                                         |                                                   | <br>                                             |
|                                       | j                                  | plant material<br> Silt loam, very fine sandy<br>  loam, mucky silt loam, mucky                                                                                                                                                                                                                                                      | <br> <br>  0<br>                   | <br> <br>  0<br>                   | <br> <br>  100<br>                                      | <br> 90-100<br>                                   | <br> 85-95<br>                                           | <br> 70-85<br>                     | <br> 25-50<br>                          | <br> 40-65<br>                                    | <br>  3-10<br>                                   |
|                                       | <br> 20-60<br> <br> <br>           | very fine sandy loam Very gravelly loamy sand, very gravelly sand, very cobbly loamy sand, gravelly sand, cobbly loamy fine sand                                                                                                                                                                                                     | <br>  0-15<br> <br> <br>           | <br> 15-35<br> <br> <br>           | <br> 40-75<br> <br> <br>                                | <br> 35-65<br> <br> <br>                          | <br> 20-45<br> <br> <br>                                 | <br> 5-15<br> <br>                 | <br> 80-95<br> <br> <br>                | <br> 5-15<br> <br>                                | <br>  0-5<br> <br> <br>                          |
| 634:<br>Nikolaevsk                    | <br> <br> 0-2                      | <br> <br> Slightly decomposed<br>  plant material                                                                                                                                                                                                                                                                                    | <br> <br>                          | <br> <br>                          | <br> <br>                                               |                                                   |                                                          |                                    |                                         | <br>                                              | <br> <br>                                        |
|                                       | 2-20                               | Mucky very fine sandy loam,<br>mucky silt loam, very fine                                                                                                                                                                                                                                                                            | <br>  0<br>                        | <br>  0<br>                        | <br>  100<br>                                           | 90-100                                            | 85-95                                                    | <br> 70-85<br>                     | 25-50                                   | <br> 40-65<br>                                    | 3-10                                             |
|                                       | <br> 20-60<br> <br> <br> <br> <br> | sandy loam, silt loam Very gravelly loamy sand, cobbly loamy fine sand, gravelly sand, very cobbly loamy sand, very gravelly sand                                                                                                                                                                                                    | <br>  0-15<br> <br> <br> <br> <br> | <br> 15-35<br> <br> <br> <br> <br> | <br> 40-75<br> <br> <br> <br> <br>                      | <br> 35-65<br> <br> <br> <br> <br>                | <br> 20-45<br> <br> <br> <br> <br>                       | <br> 5-15<br> <br> <br> <br>       | <br> 80-95<br> <br> <br> <br>           | <br> 5-15<br> <br> <br>                           | <br>  0-5<br> <br> <br> <br> <br>                |

Table 9. Engineering Sieve Data—Continued

| Map symbol                | Depth               | USDA texture                                                                                                                                      | Fragn                   |                          |                           | entage pa<br>e number     |                          |                      | <br> Sand                | <br>  Silt               | Clay                     |
|---------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------|--------------------------|--------------------------|--------------------------|
| and soil name             |                     |                                                                                                                                                   | >10<br> inches          | 3-10<br> inches          | <br>  4                   | 10                        | 40                       | 200                  | -                        |                          |                          |
|                           | <br>  In.           |                                                                                                                                                   | Pct.                    | <br>  Pct.               | <br> <br>                 | <br>                      |                          |                      | Pct.                     | Pct.                     | Pct.                     |
| 635:<br>Nikolaevsk        | <br> <br>  0-2      | <br> <br> Slightly decomposed                                                                                                                     | <br> <br>               | <br> <br>                | <br> <br>                 | <br> <br>                 |                          |                      |                          |                          | <br> <br>                |
| NIKUIAEVSK                | ·  0-2<br>          | plant material                                                                                                                                    | <br>                    | <br>                     | <br>                      |                           |                          |                      |                          |                          |                          |
|                           | 2-20                | Mucky very fine sandy loam,<br>  mucky silt loam, very fine<br>  sandy loam, silt loam                                                            | 0<br> <br>              | 0<br> <br>               | 100<br> <br>              | 90-100                    | 85-95<br> <br>           | 70 <b>-</b> 85<br>   | 25-50                    | 40-65<br>                | 3-10                     |
|                           | 20-60               | Very cobbly loamy sand, very<br>gravelly sand, very gravelly<br>loamy sand, cobbly loamy<br>fine sand, gravelly sand                              | 0-15<br> <br> <br> <br> | 15-35<br> <br> <br>      | <br> 40-75<br> <br> <br>  | 35-65<br> <br> <br>       | 20-45<br> <br> <br>      | 5-15<br> <br> <br>   | 80-95<br> <br> <br>      | 5-15<br> <br> <br>       | 0-5<br> <br> <br>        |
| 636:                      |                     | <br>                                                                                                                                              | !<br>                   | !<br>                    | !<br>                     |                           |                          | 1                    |                          |                          |                          |
| Nikolai                   |                     | Peat<br> Muck                                                                                                                                     |                         |                          | <br>                      |                           | <br>                     | <br>                 | <br>                     |                          |                          |
|                           |                     |                                                                                                                                                   | <br>  0<br> <br>        | <br>  0-10<br> <br>      | I                         | 60-100<br> <br>           | 1                        | 30-85<br> <br>       | <br> 20-65<br> <br>      | 30-75<br> <br>           | 3-10<br>  3-10<br>       |
|                           | <br> 41-60<br> <br> | gravelly fine sandy loam<br> Sand, gravelly sand, gravelly<br> loamy sand, loamy sand,<br>  very gravelly loamy sand,<br>  very gravelly sand     | <br>  0<br> <br>        | <br>  0-15<br> <br>      | <br> 55-100<br> <br>      | <br> 45-100<br> <br> <br> | <br> 30-75<br> <br> <br> | <br>  5-35<br> <br>  | <br> 75-100<br> <br>     | <br>  0-20<br> <br>      | <br>  0-5<br> <br>       |
| 637:<br>Nikolai, somewhat | <br> <br> 0-2       | <br> <br> Peat                                                                                                                                    | <br> <br>               | <br> <br>                | <br> <br>                 | <br> <br>                 | <br> <br>                |                      |                          | <br>                     | <br> <br>                |
| poorly drained            |                     | Muck                                                                                                                                              | <br>                    | <br>                     | <br>                      |                           |                          |                      |                          |                          |                          |
|                           | 32-41               | Gravelly fine sandy loam,<br>  gravelly very fine sandy<br>  loam, fine sandy loam,<br>  gravelly silt loam, silt loam,<br>  very fine sandy loam | 0<br> <br> <br>         | 0-10<br> <br> <br>       | 70-100<br> <br> <br>      | 60-100<br> <br> <br>      | 55-95<br> <br> <br>      | 30-85<br> <br> <br>  | 20-65<br> <br> <br>      | 30-75<br> <br> <br>      | 3-10<br> <br> <br>       |
|                           | <br> 41-60<br> <br> | Loamy sand, sand, gravelly loamy sand, gravelly sand, gravelly sand, very gravelly loamy sand, very gravelly sand                                 | <br>  0<br> <br> <br>   | <br>  0-15<br> <br> <br> | <br> 55-100<br> <br> <br> | 45-100<br> <br> <br>      | <br> 30-75<br> <br> <br> | 5-35<br> <br> <br>   | 75-100<br> <br>          | 0-20<br> <br> <br>       | <br>  0-5<br> <br> <br>  |
| Tuxedni                   | 0-2                 | <br> Moderately decomposed                                                                                                                        |                         | <br>                     | <br>                      |                           |                          |                      |                          |                          |                          |
|                           |                     | plant material<br> Silt loam, very fine sandy loam<br> Silt loam, gravelly                                                                        | <br>  0<br>  0          | <br>  0<br>  0-10        | <br> 70-100<br> 70-100    | <br> 60-100<br> 65-100    | <br> 55-95<br> 55-90     | <br> 35-80<br> 35-85 | <br> 25-55<br> 20-55     | <br> 40-65<br> 40-75     | <br> 0-10<br> 3-10       |
|                           |                     | sandy loam, sandy loam  Very gravelly loam, gravelly   sandy loam, very gravelly   sandy loam, very cobbly   loamy sand                           | <br>  0<br> <br> <br>   | <br>  0-30<br> <br> <br> | <br> 50-80<br> <br> <br>  | <br> 40-75<br> <br> <br>  | <br> 24-60<br> <br> <br> | <br> 10-40<br> <br>  | <br> 50-80<br> <br> <br> | <br> 10-50<br> <br> <br> | <br>  0-10<br> <br> <br> |
| 638:<br>Puntilla          | <br> <br>  0-6      | I<br> <br> Slightly decomposed                                                                                                                    | <br> <br>               | <br> <br>                | <br> <br>                 | <br>                      | <br>                     |                      |                          | <br>                     | <br>                     |
|                           |                     | plant material                                                                                                                                    |                         |                          | 100                       | 100                       | 105.05                   |                      |                          |                          |                          |
|                           |                     | Silt loam, very fine sandy loam<br> Very fine sandy loam,<br>  silt loam, mucky silt loam                                                         | 0<br>  0<br>            | 0<br>  0<br>             | 100<br>  100<br>          | 100<br> 80-100<br>        | 85-95<br> 70-95<br>      | 60-80<br> 50-80<br>  | 25-50<br> 25-50<br>      | 40-65<br> 40-65<br>      | 0-10<br>  0-10<br>       |
|                           | 36-60<br> <br>      | Loam, silt loam,<br>  gravelly loam, sandy loam<br>                                                                                               | 0<br> <br>              | 0-15<br> <br>            | 65-100<br> <br>           | 55-100<br>                | 50-90<br> <br>           | 30-70<br> <br>       | 35-55<br> <br>           | 30-65                    | 5-15<br> <br>            |
| 639:<br>Puntilla          | <br> <br>  0-6      | I<br> <br> Slightly decomposed                                                                                                                    | <br> <br>               | <br> <br>                | <br> <br>                 |                           | <br>                     |                      |                          | <br>                     | <br>                     |
|                           |                     | plant material                                                                                                                                    | İ                       | į                        | 100                       | 100                       | İ                        | İ                    |                          | 140.55                   |                          |
|                           |                     | Very fine sandy loam, silt loam<br> Very fine sandy loam,<br>  silt loam, mucky silt loam                                                         | 0<br>  0<br>            | 0<br>  0<br>             | 100<br>  100<br>          | 100<br> 80-100<br>        | 85-95<br> 70-95<br>      | 60-80<br> 50-80<br>  | 25-50<br> 25-50<br>      | 40-65<br> 40-65<br>      | 0-10<br>  0-10<br>       |
|                           | 36-60               | Silt loam, gravelly<br>  loam, sandy loam, loam                                                                                                   | i 0<br>!                | 0-15                     | 65-100                    | 55-100                    | 50-90<br>                | 30-70                | 35-55<br>                | 30-65                    | 5-15                     |

Table 9. Engineering Sieve Data—Continued

| Map symbol<br>and soil name | Depth               | USDA texture                                                                                                      | Fragn            |                     |                      | entage pa<br>e numbei   |                      |                      | <br>  Sand           | <br>  Silt         | <br>  Clay           |
|-----------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------|------------------|---------------------|----------------------|-------------------------|----------------------|----------------------|----------------------|--------------------|----------------------|
| and soil name               |                     | <br>                                                                                                              | >10<br> inches   | 3-10<br>inches      | <br>  4              | 10                      | 40                   | 200                  | _[<br>               |                    |                      |
|                             | <br>  In.           |                                                                                                                   | Pct.             | Pct.                | <br> <br>            |                         |                      | ·                    | Pct.                 | Pct.               | Pct.                 |
| 640:                        |                     | ]<br>                                                                                                             | <br>             | <br>                | !<br>                |                         |                      |                      |                      | 1                  | <br>                 |
| Qutal                       | 0-3                 | Moderately decomposed<br>  plant material                                                                         | j                | j<br>i              | j<br>i               | j                       | j                    | j                    | j                    | j                  | <br>                 |
|                             |                     | Very fine sandy loam, silt loam                                                                                   | j 0              | įο                  | 100                  | 100                     | 80-95                | 55-80                | 25-60                | 30-65              | 4-10                 |
|                             | 10-24<br>           | Fine sandy loam, silt loam,<br>  very fine sandy loam                                                             | 0<br>            | 0<br>               | 75-100<br>           | 70-100<br>              | 55 <b>-</b> 95<br>   | 35-80<br>            | 25-60<br>            | 30-65<br>          | 5-10<br>             |
|                             | 24-48<br>           | Sandy loam, gravelly<br>  loam, silt loam, loam,                                                                  | 0<br>            | 0-7<br>             | 75-100<br>           | 70-100                  | 55-95<br>            | 35-80<br>            | 25-60<br>            | 30-65              | 2-25                 |
|                             | <br> 48-60<br>      | gravelly sandy loam Very gravelly sand, sand, gravelly sand, loamy sand                                           | <br>  0<br>      | <br>  0-10<br>      | <br> 40-90<br>       | <br> 30-85<br>          | <br> 15-40<br>       | 2-20                 | <br> 80-95<br>       | <br>  5-15<br>     | <br>  0-5<br>        |
| 641:<br>Qutal               | <br> <br>  0-3      | <br> <br> Moderately decomposed                                                                                   | <br> <br>        | <br> <br>           | <br> <br>            |                         | <br>                 |                      |                      |                    | <br> <br>            |
|                             | İ                   | plant material                                                                                                    | İ                | İ                   | İ                    | İ                       | İ                    | İ                    | İ                    | i                  | İ                    |
|                             |                     | Very fine sandy loam, silt loam<br> Fine sandy loam, silt<br>  loam, very fine sandy loam                         | 0<br>  0         | 0<br>  0            | 100<br> 75-100       | 100<br> 70-100          | 80-95<br> 55-95      | 55-80<br> 35-80      | 25-60<br> 25-60      | 30-65<br> 30-65    | 4-10<br>  5-10       |
|                             | 24-48               | Silt loam, sandy loam,<br>  gravelly loam, loam,                                                                  | 0                | <br>  0-7<br>       | <br> 75-100<br>      | 70-100                  | <br> 55-95<br>       | 35-80                | 25-60                | 30-65              | 2-25                 |
|                             | <br> 48-60<br>      | gravelly sandy loam<br>Gravelly sand, very gravelly<br>sand, loamy sand, sand                                     | <br>  0<br>      | <br>  0-10<br>      | <br> 40-90<br>       | <br> 30-85<br>          | <br> 15-40<br>       | 2-20                 | <br> 80-95<br>       | <br>  5-15<br>     | <br>  0-5<br>        |
| 642:                        |                     |                                                                                                                   |                  | <br>                |                      |                         |                      |                      |                      |                    |                      |
| Qutal                       | 0-3                 | <br> Moderately decomposed<br>  plant material                                                                    | <br> <br>        | <br> <br>           | <br> <br>            |                         |                      |                      |                      |                    |                      |
|                             |                     | Very fine sandy loam, silt loam<br> Fine sandy loam, silt                                                         | <br>  0<br>  0   | <br>  0<br>  0      | <br>  100<br> 75-100 | 100<br>  100<br> 70-100 | <br> 80-95<br> 55-95 | <br> 55-80<br> 35-80 | <br> 25-60<br> 25-60 | 30-65<br>30-65     | <br>  4-10<br>  5-10 |
|                             | İ                   | loam, very fine sandy loam<br> Sandy loam, gravelly                                                               | <br> <br>  0     | <br> <br> 0-7       | İ                    | <br> <br> 70-100        | <br> <br> 55-95      | <br> <br> 35-80      | <br> <br> 25-60      | 30-65              | İ                    |
|                             | <br> <br> 48-60<br> | loam, silt loam, loam,<br>gravelly sandy loam<br>Sand, very gravelly sand,<br>loamy sand, gravelly sand           | <br> <br>  0<br> | <br> <br>  0-10<br> | <br> <br> 40-90<br>  | <br> <br> 30-85<br>     | <br> <br> 15-40<br>  | <br> <br> 2-20<br>   | <br> <br> 80-95<br>  | <br> <br> 5-15<br> | <br> <br>  0-5<br>   |
| 643:                        | İ                   |                                                                                                                   | j<br>I           | İ<br>İ              | Í<br>I               | İ                       | İ                    | İ                    | İ                    | į<br>I             | j<br>I               |
| Redoubt, terraces           |                     | Mucky peat<br> Silt loam, mucky silt                                                                              | <br>  0          | j<br>I 0            | <br> <br> 75-100     | <br> 65-100             | <br> 60-95           | j<br> 40-80          | j<br> 25-50          | <br> 40-65         | <br>  3-10           |
|                             | <br> 22-60<br>      | loam, very fine sandy loam<br>Gravelly sandy loam, sandy<br>loam, loam, gravelly loam,<br>gravelly silt loam      | <br>  0<br>      | <br>  0-7<br>       | <br> 70-100<br>      | <br> 60-100<br>         | <br> 50-90<br>       | <br> 30-70<br>       | <br> 35-60<br>       | <br> 30-60<br>     | <br>  0-10<br>       |
|                             | į                   |                                                                                                                   | İ                | į                   | İ                    | į                       | į                    | į                    | į                    | į                  | į                    |
| 644:<br>Redoubt             | <br>  0-2           | <br> Musky post                                                                                                   | <br>             | <br>                |                      |                         |                      |                      |                      |                    |                      |
| nedoubt                     |                     | Mucky peat<br> Silt loam, mucky silt                                                                              | 0                | 0                   | 75-100               | 65-100                  | 60-95                | 40-80                | 25-50                | 40-65              | 3-10                 |
|                             | 22-60               | loam, very fine sandy loam<br> Loam, gravelly loam, gravelly<br>  sandy loam, sandy loam,<br>  gravelly silt loam | <br>  0<br>      | <br>  0-7<br>       | <br> 70-100<br> <br> | <br> 60-100<br>         | <br> 50-90<br>       | <br> 30-70<br>       | <br> 35-60<br>       | <br> 30-60<br>     | 0-10                 |
| 645:                        | <br>                | <br>                                                                                                              | [<br>[           | <br>                | <br>                 | <br>                    | <br>                 |                      |                      |                    |                      |
| Redoubt                     |                     | Mucky peat<br> Mucky silt loam, very                                                                              | <br> <br>  0     | <br> <br>  0        | <br> <br> 75-100     | <br> 65-100             | <br> <br> 60-95      | <br> <br> 40-80      | <br> <br> 25-50      | <br> 40-65         | <br> 3-10            |
|                             | İ                   | fine sandy loam, silt loam<br> Gravelly sandy loam, sandy<br>  loam, gravelly silt loam,<br>  gravelly loam, loam | 0                | İ                   | İ                    | <br> 60-100<br>         | i                    | <br> 30-70<br>       | <br> 35-60<br>       | 30-60              | İ                    |

Table 9. Engineering Sieve Data—Continued

| Map symbol                  | Depth             | USDA texture                                                                       | Fragm           |                    |                      | entage pa<br>e number  |                      |                      | <br>  Sand           | <br>  Silt           | Clay                |
|-----------------------------|-------------------|------------------------------------------------------------------------------------|-----------------|--------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| and soil name               |                   | <br>                                                                               | >10<br> inches  | 3-10<br> inches    | <br>  4              | 10                     | 40                   | 200                  | - <br> <br>          |                      | <br> <br>           |
|                             | <br>  In.         |                                                                                    | <br>  Pct.<br>  | Pct.               | <br> <br>            |                        | <br> <br>            | · I———<br> <br>      | Pct.                 | Pct.                 | Pct.                |
| 646:<br>Redoubt, cool       |                   | <br> <br> Mucky peat                                                               | <br>            |                    | <br>                 |                        |                      |                      |                      |                      |                     |
|                             | i                 | Silt loam, mucky silt<br>  loam, very fine sandy loam                              | 0<br>           | 0                  | 75-100<br>           | i                      | 60-95<br>            | 40-80                | 25-50                | 40-65                | 3-10                |
|                             | 22-60             | Gravelly sandy loam, sandy<br>  loam, loam, gravelly loam,<br>  gravelly silt loam | 0<br> <br> <br> | 0-7<br> <br>       | /0-100<br> <br> <br> | 60-100<br> <br>        | 50-90<br> <br> <br>  | 30-70<br> <br>       | 35-60<br> <br> <br>  | 30-60<br> <br>       | 0-10<br> <br> <br>  |
| 647:<br>Redoubt, moderately | <br>  0-2         | <br> <br> Mucky peat                                                               | <br>            | <br>               | <br>                 | <br>                   | <br>                 | <br>                 | <br>                 | <br>                 | <br>                |
| steep                       | 2-22              | Silt loam, very fine<br>  sandy loam, mucky silt loam                              | i 0<br>i        | 0                  | 75-100               | 65-100                 | 60-95                | 40-80                | 25-50                | 40-65<br>            | 3-10                |
|                             | 22-60             | Gravelly silt loam, loam,<br>  gravelly loam, sandy loam,<br>  gravelly sandy loam | 0<br> <br>      | 0-7<br> <br>       | 70-100<br> <br>      | 60-100                 | 50-90                | 30-70<br> <br>       | 35-60<br> <br>       | 30-60                | 0-10                |
| Redoubt, gently sloping     | <br> 0-2<br> 2-22 | <br> Mucky peat<br> Very fine sandy loam,                                          | <br> <br>  0    | <br> <br>  0       | <br> <br> 75-100     | <br> <br> 65-100       | <br> <br> 60-95      | <br> <br> 40-80      | <br> <br> 25-50      | <br> <br> 40-65      | <br> <br>  3-10     |
| sioping                     | i                 | silt loam, mucky silt loam<br>  Silt loam, gravelly sandy loam,                    | 0<br> <br>  0   | i                  | İ                    | <br> <br> 60-100       | İ                    | 40-80<br> <br> 30-70 | 25-30<br> <br> 35-60 |                      | 3-10<br> <br>  0-10 |
|                             |                   | gravelly loam, gravelly silt loam, sandy loam                                      | 0<br> <br>      | 0-7<br> <br>       | /0-100<br> <br> <br> |                        |                      |                      |                      |                      |                     |
| 648:<br>Redoubt, cool       | <br> <br>  0-2    | <br> <br> Mucky peat                                                               | <br> <br>       | <br> <br>  <b></b> | <br> <br>            |                        |                      |                      |                      |                      | <br> <br>           |
| Treddubt, cool              |                   | Silt loam, mucky silt<br>  loam, very fine sandy loam                              | 0               | 0                  | 75-100               | 65-100                 | 60-95                | 40-80                | 25-50                | 40-65                | 3-10                |
|                             | 22-60             | Sandy loam, gravelly sandy<br> loam, loam, gravelly loam,<br>  gravelly silt loam  | <br>  0<br>     | 0-7<br> <br>       | <br> 70-100<br> <br> | 60-100                 | 50-90<br>            | 30-70<br> <br>       | 35-60<br>            | 30-60                | 0-10                |
| Tuxedni                     | <br>  0-2         | <br> Moderately decomposed<br>  plant material                                     | <br>            | <br>               | <br>                 |                        | <br>                 |                      |                      |                      | <br>                |
|                             |                   | Silt loam, very fine sandy loam<br> Silt loam, gravelly                            | <br>  0<br>  0  |                    |                      |                        | <br> 55-95<br> 55-90 | <br> 35-80<br> 35-85 | <br> 25-55<br> 20-55 | <br> 40-65<br> 40-75 | 0-10                |
|                             | İ                 | sandy loam, sandy loam<br>Gravelly sandy loam, very                                | 0<br> <br>  0   | İ                  | <br> <br> 50-80      | <br> <br> 40-75        |                      | 10-40                | <br> <br> 50-80      | 110-50               | İ                   |
|                             |                   | gravelly sandy loam, very<br>  cobbly loamy sand, very<br>  gravelly loam          | <br> <br> <br>  | <br> <br> <br>     | <br> <br> <br>       |                        |                      |                      |                      |                      |                     |
| 649:<br>Riverwash           | <br> <br>         | <br>                                                                               | <br> <br>       | <br> <br>          | <br> <br> <br>       |                        |                      |                      |                      |                      | <br> <br> <br>      |
| 650:<br>Salamatof           | <br>  0-4         | <br> <br> Peat                                                                     | j<br>           | <br>               | j<br>                | j<br>                  | j<br>                | j<br>                | j<br>                | j<br>                | <br>                |
|                             | 4-60<br>          | Woody peat<br>                                                                     | j<br>i          | <br>               | j<br>i               | j                      | j                    | j                    | j                    | j<br>i               | <br>                |
| Doroshin                    |                   | <br> Mucky peat<br> Silt loam, very fine sandy loam<br>                            | <br>  0<br>     | <br>  0            | <br>  100            | 90-100                 | <br> 85-90           | <br> 70-85           | <br> 25-55           | <br> 35-75           | <br>  0-5           |
| 651:<br>Salamatof           | <br> -<br>  0-4   | <br> <br> Peat                                                                     | <br> <br>       | <br> <br>          | <br> <br>            | <br>                   | <br>                 |                      | <br>                 |                      | <br>                |
|                             | 1 '               | Woody peat                                                                         | <br> <br>       | <br> <br>          | <br> <br>            |                        |                      |                      |                      |                      |                     |
| 652:<br>Slikok              | <br> <br>  0-13   | <br> <br> Peat                                                                     | <br> <br>       | <br> <br>          | <br> <br>            | <br>                   | <br>                 | <br>                 | j<br>                | <br>                 | <br>                |
|                             | 13-51             | Mucky silt loam, silt loam<br> Fine sandy loam, silt loam,                         | 0<br>  0        | 0                  | 100<br> 55-90        | 100<br>  100<br> 50-85 | 90-97<br> 50-80      | 70-85<br>30-70       | 20-45<br>20-55       | 50-75<br> 40-70      | 5-10                |
|                             |                   | very gravelly sandy loam,<br>gravelly silt loam, gravelly<br>fine sandy loam       | <br> <br> <br>  | 0-13<br> <br>      | <br> <br> <br>       |                        |                      |                      |                      |                      |                     |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | Depth             | USDA texture                                                                                    | Fragn<br> <br>  >10 | nents<br><br>  3-10    |                          | entage pa<br>e numbe     |                           |                           | <br>  Sand                | <br>  Silt                | <br>  Clay              |
|--------------------------|-------------------|-------------------------------------------------------------------------------------------------|---------------------|------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|
| and son name             |                   |                                                                                                 |                     | inches                 | 4                        | 10                       | 40                        | 200                       | -                         |                           |                         |
|                          | <br>  In.         |                                                                                                 | Pct.                | Pct.                   | <br>                     | ļ                        | ļ                         |                           | Pct.                      | Pct.                      | Pct.                    |
| 653:<br>Slikok           | 13-51             | Mucky silt loam, silt loam<br> Very gravelly sandy loam,                                        | <br> <br>  0<br>  0 | <br> <br>  0<br>  0-15 | <br> <br>  100<br> 55-90 | <br> <br>  100<br> 50-85 | <br> <br> 90-97<br> 50-80 | <br> <br> 70-85<br> 30-70 | <br> <br> 20-45<br> 20-55 | <br> <br> 50-75<br> 40-70 | <br> <br> 5-10<br> 0-10 |
|                          | <br> <br> <br>    | gravelly silt loam, gravelly<br>fine sandy loam, silt loam,<br>fine sandy loam                  | <br> <br> <br>      | <br> <br> <br>         | <br> <br> <br>           |                          | <br> <br> <br>            |                           |                           |                           | <br> <br> <br>          |
| 654:<br>Smithfha         | <br>-  0-3        | <br> Moderately decomposed                                                                      | <br>                | ļ<br>                  | <br>                     | j                        | ļ<br>                     |                           |                           | j<br>                     | <br>                    |
| Cimamia                  | <br> <br> 3-4     | plant material<br> Silt loam, very fine sandy                                                   | <br> <br>  0        | <br> <br>  0           | <br> <br> 95-100         | 90-100                   | <br> 45-80                | <br> 25-70                | <br> 35-85                | <br> 15-60                | <br> <br> 0-5           |
|                          | <br>  4-18<br>    | loam, loamy very fine sand<br>Very fine sandy loam,<br>loamy very fine sand,                    | <br>  0<br>         | <br>  0<br>            | <br> 95-100<br>          | <br> 90-100<br>          | <br> 45-80<br>            | <br> 25-70<br>            | <br> 35-90<br>            | <br> 10-60<br>            | <br>  0-5<br>           |
|                          | <br> 18-60<br>    | silt loam, sandy loam Sand, fine sand, loamy very fine sand                                     | <br>  0<br>         | <br>  0<br>            | <br> 95-100<br>          | <br> 90-100<br>          | <br> 65-80<br>            | <br> 20-40<br>            | <br> 70-90<br>            | <br> 10-20<br>            | <br>  0-5<br>           |
| 655:<br>Smithfha         | <br>-  0-3        | <br> <br> Moderately decomposed                                                                 | <br> <br>           | <br>                   | <br> <br>                | <br>                     | <br>                      |                           |                           |                           |                         |
|                          | <br>  3-4         | plant material<br> Loamy very fine sand, very                                                   | <br>  0             | <br>  0                | <br> 95-100              | <br> 90-100              | <br> 45-80                | <br> 25-70                | <br> 35-85                | <br> 15-60                | <br> 0-5                |
|                          | <br>  4-18<br>    | fine sandy loam, silt loam<br> Loamy very fine sand,<br>  very fine sandy loam,                 | <br>  0<br>         | <br>  0<br>            | <br> 95-100<br>          | <br> 90-100<br>          | <br> 45-80<br>            | <br> 25-70<br>            | <br> 35-90<br>            | <br> 10-60<br>            | <br>  0-5<br>           |
|                          | <br> 18-60<br>    | silt loam, sandy loam<br> Loamy very fine sand,<br>  fine sand, sand                            | <br>  0<br>         | <br>  0<br>            | <br> 95-100<br> <br>     | <br> 90-100<br>          | <br> 65-80<br>            | <br> 20-40<br>            | <br> 70-90<br>            | <br> 10-20<br>            | 0-5                     |
| 656:<br>Smokey Bay       | <br> -<br>  0-2   | <br> Highly decomposed plant<br>  material                                                      | <br> <br>           | <br>                   | <br>                     | <br>                     | <br>                      | <br>                      | <br>                      | <br>                      | <br>                    |
|                          | 2-9<br>  9-55     | Silt loam, very fine sandy loam<br>Stratified silt loam to fine<br>sandy loam, gravelly fine    | 0 0                 | 0<br>  0-8<br>         | 80-100<br> 65-95<br>     | 75-100<br> 55-90         | 70-95<br> 50-85           | 45-80<br> 30-75<br>       | 25-70<br> 20-55<br>       | 25-65<br> 40-75<br>       | 5-10<br>  0-5           |
|                          | <br> 55-60<br>    | sandy loam<br> Fine sandy loam, loam, silt<br>  loam, gravelly fine sandy loam                  | <br>  0<br>         | <br>  0<br>            | <br> 70-100<br>          | <br> 65-100<br>          | <br> 60-95<br>            | <br> 35-70<br>            | <br> 35-60<br>            | 30-50                     | <br> 10-25<br>          |
| 657:                     |                   | <br>                                                                                            | <br>                |                        | <br>                     |                          |                           |                           |                           |                           |                         |
| Smokey Bay               | İ                 | Highly decomposed plant<br>  material                                                           | <br>                | <br>                   | <br>                     |                          |                           |                           |                           |                           | <del></del><br>         |
|                          | 2-9<br>  9-55<br> | Silt loam, very fine sandy loam<br> Gravelly fine sandy loam,<br>  stratified silt loam to fine | 0<br>  0<br>        | 0<br> 0-8<br>          | 80-100<br> 65-95<br>     | 75-100<br> 55-90<br>     | 70-95<br> 50-85<br>       | 45-80<br> 30-75<br>       | 25-70<br> 20-55<br>       | 25-65<br> 40-75<br>       | 5-10<br>  0-5<br>       |
|                          | <br> 55-60<br>    | sandy loam<br>Gravelly fine sandy loam, fine<br>sandy loam, silt loam, loam                     | <br>  0<br>         | <br>  0<br>            | <br> 70-100<br>          | <br> 65-100<br>          | <br> 60-95<br>            | <br> 35-70<br>            | <br> 35-60<br>            | 30-50                     | <br> 10-25<br>          |
| 658:                     |                   |                                                                                                 | <br>                | <u> </u>               | <br>                     | ļ<br>ļ                   |                           | ļ                         |                           |                           |                         |
| Snowdance                | İ                 | Slightly decomposed<br>  plant material                                                         | <br>                | <br>                   | <br>                     |                          |                           |                           |                           |                           | <br>                    |
|                          | 3-8<br>           | Silt loam, mucky silt<br>  loam, very fine sandy loam                                           | 0<br>               | 0<br>                  | 100<br>                  | 100<br>                  | 85-95<br>                 | 60-80<br>                 | 25-55<br>                 | 45-65<br>                 | 0-10<br>                |
|                          | 8-24<br>          | Gravelly silt loam,<br>  cobbly silt loam, silt loam                                            | 0<br>               | 0-25<br>               | 70-100<br>               | 65-100<br>               | 55-95<br>                 | 40-80<br>                 | 25-50<br>                 | 50-65<br>                 | 0-10                    |
|                          | 24-60<br>         | Very gravelly sandy<br>loam, very cobbly<br>sandy loam, very                                    | 0-6<br> <br>        | <br> 15-45<br> <br>    | 50-80<br> <br>           | <br> 35-75<br> <br>      | 25-60<br>                 | 15-40<br>                 | 50-70                     | 25-45<br> <br>            | 0-5                     |
|                          |                   | gravelly fine sandy loam                                                                        | <br>                | <br>                   | <br>                     | <br>                     | <br>                      |                           |                           |                           |                         |

Table 9. Engineering Sieve Data—Continued

| Map symbol                    | Depth               | USDA texture                                                                                                                      | Fragn            |                     |                     | entage pa<br>e numbe |                     |                     | <br>  Sand          | <br>  Silt         | <br>  Clay        |
|-------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|--------------------|-------------------|
| and soil name                 |                     | <br>                                                                                                                              | >10<br> inches   | 3-10<br> inches     | <br>  4             | 10                   | 40                  | 200                 | _ <br>              |                    | <br>              |
|                               | <br>  In.           |                                                                                                                                   | <br>  Pct.       | <br>  Pct.          | <br> <br>           |                      |                     | -  <br>             | <br>  Pct.          | Pct.               | Pct.              |
| 659:                          |                     | <br>                                                                                                                              |                  | !<br>               | <br>                | 1                    |                     | 1                   | 1                   |                    |                   |
| Soldotna                      | 0-4                 | Moderately decomposed                                                                                                             |                  |                     | ļ                   |                      |                     | ļ                   | ļ                   | ļ                  |                   |
|                               | <br>  4-7           | plant material<br> Silt loam, very fine sandy loam                                                                                | <br>  0          | l<br>l 0            | <br>  100           | <br>  100            | <br> 80-95          | <br> 45-75          | l<br> 30-65         | <br> 40-65         | <br>  0-5         |
|                               |                     | Very fine sandy loam, silt loam                                                                                                   |                  | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               | 22-29               | Gravelly silt loam, very                                                                                                          | 0                | 0                   | 60-100              | 45-100               | 40-90               | 20-75               | 30-65               | 40-65              | 0-5               |
|                               | <br> 29-60<br> <br> | fine sandy loam, silt loam<br> Stratified very gravelly sand to<br>  silt loam, very gravelly loamy<br>  sand, very gravelly sand | <br>  0<br> <br> | <br>  0-15<br> <br> | <br> 50-70<br> <br> | <br> 40-60<br> <br>  | <br> 20-55<br> <br> | <br>  4-35<br>      | <br> 45-95<br> <br> | <br> 5-55<br> <br> | <br> 0-5<br> <br> |
| 660:                          |                     | <br>                                                                                                                              |                  | <br>                | <br>                |                      |                     |                     |                     |                    |                   |
| Soldotna                      | 0-4                 | Moderately decomposed                                                                                                             |                  | ļ                   |                     |                      |                     | ļ                   | ļ                   |                    | ļ                 |
|                               | <br>  4-7           | plant material<br> Very fine sandy loam, silt loam                                                                                |                  | <br>  0             | <br>  100           | <br>  100            | <br> 80-95          | <br> 45-75          | <br> 30-65          | <br> 40-65         | <br>  0-5         |
|                               |                     | Very fine sandy loam, silt loam                                                                                                   |                  | 0<br>  0            | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 140-65             | 0-5               |
|                               | 22-29               | Silt loam, gravelly silt loam,                                                                                                    | 0                | 0                   | 60-100              | 45-100               | 40-90               | 20-75               | 30-65               | 40-65              | 0-5               |
|                               | <br> 29-60<br>      | very fine sandy loam<br> Stratified very gravelly sand to<br>  silt loam, very gravelly sand,<br>  very gravelly loamy sand       | <br>  0<br>      | <br>  0-15<br> <br> | <br> 50-70<br> <br> | <br> 40-60<br> <br>  | <br> 20-55<br>      | <br>  4-35<br>      | <br> 45-95<br> <br> | <br> 5-55<br>      | <br> 0-5<br>      |
| 661:                          |                     |                                                                                                                                   | <br>             | <br>                | <br>                |                      |                     |                     |                     |                    |                   |
| Soldotna                      | 0-4                 | Moderately decomposed<br>  plant material                                                                                         | ļ                |                     | ļ                   | ļ                    | ļ                   |                     |                     | ļ                  |                   |
|                               | <br>  4-7           | Very fine sandy loam, silt loam                                                                                                   | l<br>l 0         | l<br>l 0            | l<br>  100          | 1 100                | l<br>180-95         | l<br> 45-75         | l<br> 30-65         | l<br> 40-65        | <br>  0-5         |
|                               |                     | Very fine sandy loam, silt loam                                                                                                   |                  | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               | 22-29               | Silt loam, gravelly silt loam,                                                                                                    | 0                | 0                   | 60-100              | 45-100               | 40-90               | 20-75               | 30-65               | 40-65              | 0-5               |
|                               | <br> 29-60<br> <br> | very fine sandy loam Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand                     | <br>  0<br> <br> | <br>  0-15<br> <br> | <br> 50-70<br> <br> | <br> 40-60<br> <br>  | <br> 20-55<br> <br> | <br>  4-35<br> <br> | <br> 45-95<br> <br> | <br> 5-55<br> <br> | <br> 0-5<br> <br> |
| 662:                          |                     |                                                                                                                                   | <br>             | <br>                | <br>                |                      |                     |                     |                     |                    |                   |
| Soldotna                      | 0-4                 | Moderately decomposed                                                                                                             |                  | ļ                   | ļ                   |                      |                     |                     |                     |                    |                   |
|                               | <br>  4-7           | plant material<br> Very fine sandy loam, silt loam                                                                                | 0                | l<br>l 0            | l<br>  100          | 1 100                | <br> 80-95          | <br> 45-75          | l<br> 30-65         | l<br> 40-65        | 0-5               |
|                               | 7-22                | Silt loam, very fine sandy loam                                                                                                   |                  | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               | 22-29               | Gravelly silt loam, very fine                                                                                                     | 0                | 0                   | 60-100              | 45-100               | 40-90               | 20-75               | 30-65               | 40-65              | 0-5               |
|                               | <br> 29-60<br>      | sandy loam, silt loam<br> Very gravelly loamy sand,<br>  very gravelly sand, stratified<br>  very gravelly sand to silt loam      | <br>  0<br> <br> | <br>  0-15<br>      | <br> 50-70<br> <br> | <br> 40-60<br> <br>  | <br> 20-55<br> <br> | <br>  4-35<br>      | <br> 45-95<br> <br> | <br>  5-55<br>     | <br> 0-5<br>      |
| 663:                          |                     | <br>                                                                                                                              | <br>             | <br>                | <br>                |                      |                     |                     |                     |                    | <br>              |
| Soldotna, sandy<br>substratum | 0-4<br>             | Moderately decomposed<br>  plant material                                                                                         | <br>             | <br>                | <br>                |                      |                     |                     |                     |                    | <br>              |
|                               | 4-7                 | Very fine sandy loam, silt loam                                                                                                   |                  | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               |                     | Very fine sandy loam, silt loam<br> Very fine sandy loam, gravelly                                                                |                  | 0<br>1 0            | 100<br> 60-100      | 100<br> 45-100       | 80-95<br>40-90      | 45-75<br>20-75      | 30-65<br>30-65      | 40-65<br> 40-65    | 0-5               |
|                               | 22-29               | silt loam, silt loam                                                                                                              | 0                | U<br>               | 60-100<br>          | 45-100               | 40-90<br>           | 20-75<br>           | 30-65<br>           | <del>4</del> 0-65  | U-5               |
|                               | 29-60               | Fine sand, gravelly loamy<br>  sand, sand                                                                                         | 0<br>            | 0-8<br>             | 80-100              | 75-100               | 30-55               | 6-30                | 75-95               | 5-20               | 0-5               |
| 664:                          |                     |                                                                                                                                   |                  |                     |                     |                      |                     |                     |                     |                    |                   |
| Soldotna, sandy<br>substratum | 0-4<br>             | Moderately decomposed<br>  plant material                                                                                         | <br>             | <br>                | <br>                |                      |                     |                     |                     |                    | <br>              |
|                               | 4-7                 | Very fine sandy loam, silt loam                                                                                                   | 0                | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               | 7-22                | Very fine sandy loam, silt loam                                                                                                   |                  | 0                   | 100                 | 100                  | 80-95               | 45-75               | 30-65               | 40-65              | 0-5               |
|                               | 22-29               | Very fine sandy loam, gravelly   silt loam, silt loam                                                                             | 0<br>            | 0<br>               | 60-100<br>          | 45-100<br>           | 40-90<br>           | 20-75<br>           | 30-65<br>           | 40-65<br>          | 0-5               |
|                               | 29-60               | Fine sand, gravelly loamy                                                                                                         | 0                | <br>  0-8           | <br> 80-100         | <br> 75-100          | 30-55               | 6-30                | <br> 75-95          | 5-20               | 0-5               |
|                               | j                   | sand, sand                                                                                                                        | İ                | İ                   | İ                   | j                    | j                   | j                   | İ                   | İ                  | İ                 |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name   | <br>  Depth    | USDA texture                                                                             | Fragn<br> <br>  >10 | nents          |                 | entage pa<br>e number |                 |                 | Sand            | <br>  Silt      | <br>  Clay     |
|----------------------------|----------------|------------------------------------------------------------------------------------------|---------------------|----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|----------------|
| and son name               |                | <br>                                                                                     |                     | inches         | 4               | 10                    | 40              | 200             | -               |                 | <br>           |
|                            | <br>  In.      |                                                                                          | Pct.                | Pct.           | <br>            |                       |                 |                 | Pct.            | Pct.            | Pct.           |
| 665:                       |                | <br>                                                                                     |                     |                |                 |                       |                 |                 |                 |                 |                |
| Soldotna, sandy substratum | İ              | Moderately decomposed<br>  plant material                                                | <br>                | <br>           | <br>            |                       | <br>            |                 |                 |                 | <br>           |
|                            | 4-7            | Very fine sandy loam, silt loam                                                          | 0                   | 0              | 100             | 100                   | 80-95           | 45-75           | 30-65           | 40-65           | 0-5            |
|                            |                | Very fine sandy loam, silt loam<br> Very fine sandy loam, gravelly                       |                     | 0<br>  0       | 100<br> 60-100  | 100<br> 45-100        | 80-95<br> 40-90 | 45-75<br> 20-75 | 30-65<br> 30-65 | 40-65<br> 40-65 | 0-5<br>  0-5   |
|                            | İ              | silt loam, silt loam                                                                     | j                   | İ              | İ               | İ                     | İ               | j               |                 | j               | İ              |
|                            | 29-60          | Fine sand, gravelly loamy<br>  sand, sand                                                | 0<br>               | 0-8<br>        | 80-100<br>      | 75-100<br>            | 30-55<br>       | 6-30<br>        | 75-95<br>       | 5-20            | 0-5<br>        |
| 666:                       |                | <br>                                                                                     |                     | !<br>          | <br>            |                       |                 |                 |                 |                 | <br>           |
| Soldotna, sandy            |                | Moderately decomposed                                                                    |                     |                |                 |                       |                 |                 |                 |                 |                |
| substratum                 |                | plant material<br> Very fine sandy loam, silt loam                                       | <br>  0             | l<br>l 0       | <br>  100       | 100                   | l<br> 80-95     | <br> 45-75      | <br> 30-65      | <br> 40-65      | <br>  0-5      |
|                            | 7-22           | Very fine sandy loam, silt loam                                                          | j 0                 | 0              | 100             | 100                   | 80-95           | 45-75           | 30-65           | 40-65           | 0-5            |
|                            | 22-29          | Very fine sandy loam, gravelly   silt loam, silt loam                                    | 0                   | 0              | 60-100          | 45-100                | 40-90           | 20-75           | 30-65           | 40-65           | 0-5            |
|                            | <br> 29-60<br> | Fine sand, gravelly loamy<br>  sand, sand                                                | <br>  0<br>         | <br>  0-8<br>  | <br> 80-100<br> | <br> 75-100<br>       | <br> 30-55<br>  | <br>  6-30<br>  | <br> 75-95<br>  | <br>  5-20<br>  | <br>  0-5<br>  |
| 667:                       |                |                                                                                          |                     |                |                 |                       |                 |                 |                 |                 |                |
| Soldotna, strongly sloping | 0-4            | Moderately decomposed<br>  plant material                                                | <br> <br>           | <br> <br>      |                 | <br>                  |                 |                 |                 |                 | <br> <br>      |
| . •                        |                | Silt loam, very fine sandy loam                                                          |                     | 0              | 100             | 100                   | 80-95           | 45-75           | 30-65           | 40-65           | 0-5            |
|                            |                | Silt loam, very fine sandy loam<br> Silt loam, very fine sandy                           | 0<br>  0            | 0<br>  0       | 100<br> 60-100  | 100<br> 45-100        | 80-95<br> 40-90 | 45-75<br> 20-75 | 30-65<br> 30-65 | 40-65<br> 40-65 | 0-5<br>  0-5   |
|                            | 22-29          | loam, gravelly silt loam                                                                 | 0                   | U              |                 | 45-100                | 40-90           | 20-73           |                 |                 | 0-3            |
|                            | 29-60<br> <br> | Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand | 0<br> <br>          | 0-15<br> <br>  | 50-70<br> <br>  | 40-60<br> <br>        | 20-55<br> <br>  | 4-35<br> <br>   | 45-95<br> <br>  | 5-55<br> <br>   | 0-5<br> <br>   |
| Soldotna, gently           | <br>  0-4      | <br> Moderately decomposed                                                               | <br>                | <br>           | <br>            | <br>                  | <br>            | <br>            | <br>            | <br>            | <br>           |
| sloping                    | <br>  4-7      | plant material<br> Silt loam, very fine sandy loam                                       | <br>  0             | <br>  0        | <br>  100       | <br>  100             | <br> 80-95      | <br> 45-75      | <br> 30-65      | <br> 40-65      | <br>  0-5      |
|                            |                | Very fine sandy loam, silt loam                                                          |                     | 0              | 100             | 100                   | 80-95           | 45-75           | 30-65           | 40-65           | 0-5            |
|                            | 22-29          | Very fine sandy loam, gravelly                                                           | 0                   | 0              | 60-100          | 45-100                | 40-90           | 20-75           | 30-65           | 40-65           | 0-5            |
|                            | <br> 29-60<br> | silt loam, silt loam Very gravelly sand, stratified very gravelly sand to silt loam,     | <br>  0<br>         | <br>  0-15<br> | <br> 50-70<br>  | <br> 40-60<br>        | <br> 20-55<br>  | <br>  4-35<br>  | <br> 45-95<br>  | <br>  5-55<br>  | <br>  0-5<br>  |
|                            |                | very gravelly loamy sand                                                                 |                     | <br>           |                 |                       | 1               |                 |                 |                 | <br>           |
| 668:                       |                |                                                                                          |                     | <u> </u>       |                 | İ                     | i               |                 |                 |                 |                |
| Soldotna, sandy            | 0-4            | Moderately decomposed                                                                    |                     |                |                 |                       |                 |                 |                 |                 |                |
| substratum                 | <br>  4-7      | plant material<br> Very fine sandy loam, silt loam                                       | <br>  0             | <br>  0        | <br>  100       | 100                   | l<br> 80-95     | <br> 45-75      | <br> 30-65      | <br> 40-65      | <br>  0-5      |
|                            | 7-22           | Very fine sandy loam, silt loam                                                          | j o                 | 0              | 100             | 100                   | 80-95           | 45-75           | 30-65           | 40-65           | 0-5            |
|                            | 22-29          | Very fine sandy loam, gravelly                                                           | 0                   | 0              | 60-100          | 45-100                | 40-90           | 20-75           | 30-65           | 40-65           | 0-5            |
|                            | <br> 29-60<br> | silt loam, silt loam<br> Fine sand, gravelly loamy<br>  sand, sand                       | <br>  0<br>         | <br>  0-8<br>  | <br> 80-100<br> | <br> 75-100<br>       | <br> 30-55<br>  | <br>  6-30<br>  | <br> 75-95<br>  | <br>  5-20<br>  | <br>  0-5<br>  |
| Kenai                      | 0-2            | <br> Moderately decomposed                                                               | <br>                | j<br>          | <br>            |                       | <br>            | <br>            |                 | ļ<br>           | <br>           |
|                            | <br>  2-6      | plant material<br> Very fine sandy loam, silt loam                                       | <br>  0             | <br>  0        | <br>  100       | <br>  100             | <br> 80-95      | <br> 50-80      | <br> 25-60      | <br> 35-65      | <br> 5-10      |
|                            | 6-19           | Silt loam, very fine sandy loam                                                          | įο                  | j 0            | 100             | 100                   | 80-95           | 50-80           | 25-60           | 35-65           | 5-10           |
|                            | 19-24          | Very fine sandy loam,                                                                    | 0                   | 0              | 90-100          | 85-100                | 75-97           | 40-85           | 20-70           | 25-75           | 3-10           |
|                            | <br> 25-60<br> | loam, silt loam<br> Silty clay loam, silt<br>  loam, gravelly loam                       | <br>  0<br>         | <br>  0<br>    | <br> 85-100<br> | <br> 80-100<br>       | <br> 75-99<br>  | <br> 50-95<br>  | <br>  5-45<br>  | <br> 35-75<br>  | <br> 20-35<br> |
|                            | İ              |                                                                                          | İ                   | İ              | İ               | İ                     | İ               | İ               | İ               | İ               | İ              |

Table 9. Engineering Sieve Data—Continued

| Map symbol                    | <br>  Depth         | USDA texture                                                                                                                         | Fragn<br>         |                     |                             | entage pa<br>e numbei | -                   |                     | <br>  Sand          | <br>  Silt                | <br>  Clay        |
|-------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|-----------------------------|-----------------------|---------------------|---------------------|---------------------|---------------------------|-------------------|
| and soil name                 |                     |                                                                                                                                      |                   | 3-10<br> inches     | <br>  4                     | 10                    | 40                  | 200                 | - <br>              |                           |                   |
|                               | <br>  In.           |                                                                                                                                      | Pct.              | Pct.                | <br>                        |                       |                     |                     | Pct.                | Pct.                      | Pct.              |
| 669:                          |                     | <br>                                                                                                                                 | !<br>             | <u> </u>            | l<br>I                      | l<br>I                | 1                   |                     | l                   | -                         | <br>              |
| Soldotna, sandy<br>substratum | 0-4                 | Moderately decomposed<br>  plant material                                                                                            | ļ                 | ļ                   | ļ                           | ļ                     | ļ                   |                     | ļ                   | ļ                         |                   |
|                               | 4-7                 | Very fine sandy loam, silt loam                                                                                                      | j 0               | 0                   | 100                         | 100                   | 80-95               | 45-75               | 30-65               | 40-65                     | 0-5               |
|                               | 7-22<br> 22-29      | Very fine sandy loam, silt loam<br>Very fine sandy loam, gravelly                                                                    |                   | 0<br>  0            | 100<br> 60-100              | 100<br> 45-100        | 80-95<br> 40-90     | 45-75<br> 20-75     | 30-65<br>30-65      | 40-65<br>40-65            | 0-5               |
|                               | <br> 29-60<br>      | silt loam, silt loam<br> Fine sand, gravelly loamy<br>  sand, sand                                                                   | <br>  0<br>       | <br>  0-8<br>       | <br> 80-100<br>             | <br> 75-100<br>       | <br> 30-55<br>      | <br>  6-30<br>      | <br> 75-95<br>      | <br>  5-20<br>            | <br>  0-5<br>     |
| Kenai                         | <br> -<br>  0-2     | <br> Moderately decomposed                                                                                                           | <br>              | j<br>               | <br>                        | <br>                  | <br>                |                     | ļ<br>               | ļ<br>                     | <br>              |
|                               | <br>  2-6           | plant material<br> Silt loam, very fine sandy loam                                                                                   |                   | <br>  0             | <br>  100                   | <br>  100             | <br> 80-95          | <br> 50-80          | <br> 25-60          | <br> 35-65                |                   |
|                               |                     | Very fine sandy loam, silt loam                                                                                                      |                   | 0<br>  0            | 100                         | 100                   | 80-95               | 150-80              | 25-60               | 35-65                     | 5-10              |
|                               |                     | Very fine sandy loam,<br>  loam, silt loam                                                                                           | 0<br>             | 0<br>               | 90-100                      | 85-100                | 75-97<br>           | 40-85<br>           | 20-70               | 25-75<br>                 |                   |
|                               | 25-60               | Gravelly loam, silt loam,<br>  silty clay loam                                                                                       | [ 0<br>[          | 0<br> <br>          | 85-100                      | 80-100                | 75-99               | 50-95               | 5-45                | 35-75                     | 20-35             |
| 670:<br>Soldotna              | <br>-  0-4          | <br> <br> Moderately decomposed                                                                                                      | <br> <br>         | <br> <br>           | <br> <br>                   | <br>                  |                     | <br>                |                     |                           | <br>              |
| Coldottia                     | -                   | plant material                                                                                                                       | i                 | i                   | i                           | i                     | i                   | l                   |                     | i                         | i                 |
|                               | 4-7                 | Very fine sandy loam, silt loam                                                                                                      | jο                | įο                  | 100                         | 100                   | 80-95               | 45-75               | 30-65               | 40-65                     | 0-5               |
|                               |                     | Silt loam, very fine sandy loam                                                                                                      |                   | 0                   | 100                         | 100                   | 80-95               | 45-75               | 30-65               | 40-65                     |                   |
|                               | İ                   | Silt loam, gravelly silt loam,<br>  very fine sandy loam                                                                             | 0<br>             | 0<br>               | İ                           | j                     | 40-90<br>           | 20-75               | 30-65               | 40-65                     | İ                 |
|                               | 29-60<br> <br>      | Very gravelly sand, stratified<br>  very gravelly sand to silt loam,<br>  very gravelly loamy sand                                   | 0<br> <br>        | 0-15<br> <br>       | 50-70<br> <br>              | 40-60<br> <br>        | 20-55<br> <br>      | 4-35<br> <br>       | 45-95<br> <br>      | 5-55<br> <br>             | 0-5<br> <br>      |
| Kichatna                      | -  0-2              | <br> Slightly decomposed                                                                                                             | <br>              | <br>                | <br>                        |                       |                     | <br>                |                     |                           |                   |
|                               | <br>  2-4           | plant material<br> Silt loam, very fine sandy loam                                                                                   | l<br>I 0          | <br>  0-10          | <br> 90-100                 | <br> 85-100           | <br> 80-100         | <br> 70-90          | <br> 20-60          | <br> 30-70                | <br>  5-15        |
|                               | 4-11                | Silt loam, very fine sandy loam<br>Very gravelly sandy loam, very                                                                    | j o               | 0-5                 | 90-100<br> 40-75            | 85-100<br> 35-70      | 80-100<br> 20-40    | 70-90<br> 10-20     | 20-60<br> 65-85     | 30-70<br> 12-25           | 5-15<br>  3-10    |
|                               | İ                   | gravelly loamy coarse sand<br>Very gravelly loamy sand, very                                                                         | İ                 | <br> 10-25          | <br> 15-55                  | <br> 10-50            | <br> 10-30          | <br>  0-15          | j<br> 80-98         | j<br>  2-20               | j<br>  0-5        |
|                               | <br> <br> <br>      | gravelly sand, extremely gravelly coarse sand, extremely gravelly loamy coarse sand                                                  | <br> <br> <br>    | <br> <br> <br>      | <br> <br> <br>              |                       |                     | <br> <br> <br>      | <br> <br> <br>      |                           | <br> <br> <br>    |
| 671:                          |                     |                                                                                                                                      | <br>              | <br>                | <br>                        |                       |                     | <br>                |                     |                           | <br>              |
| Soldotna                      | -   0-4<br>         | Moderately decomposed<br>  plant material                                                                                            | j<br>I            | j<br>I              | j<br>I                      | j                     | j                   | <br>                | j                   | j                         | <br>              |
|                               |                     | Very fine sandy loam, silt loam                                                                                                      |                   | j 0                 | 100                         | 100                   | 80 <b>-</b> 95      | 45-75               | 30-65               | 40-65                     | 0-5               |
|                               |                     | Silt loam, very fine sandy loam<br> Very fine sandy loam,                                                                            | 0<br>  0          | 0<br>  0            | 100<br> 60-100              | 100<br> 45-100        | 80-95<br> 40-90     | 45-75<br> 20-75     | 30-65<br> 30-65     | 40-65<br> 40-65           | 0-5<br>  0-5      |
|                               | <br> 29-60<br>      | gravelly silt loam, silt loam<br> Very gravelly loamy sand, very<br>  gravelly sand, stratified very<br>  gravelly sand to silt loam | <br>  0<br> <br>  | <br>  0-15<br> <br> | <br> 50-70<br> <br>         | <br> 40-60<br> <br>   | <br> 20-55<br> <br> | <br>  4-35<br> <br> | <br> 45-95<br> <br> | <br> 5-55<br>             | <br>  0-5<br>     |
| Kichatna                      | <br>-  0-2          | <br> Slightly decomposed<br>  plant material                                                                                         | <br>              | <br>                | <br>                        |                       |                     |                     |                     |                           | <br>              |
|                               | 2-4                 | Silt loam, very fine sandy loam                                                                                                      | 0                 | <br>  0-10          | <br> 90-100                 | <br> 85-100           | 1<br>180-100        | 1<br> 70-90         | <br> 20-60          | 30-70                     | <br>  5-15        |
|                               | 4-11                | Silt loam, very fine sandy loam<br>Very gravelly sandy loam, very                                                                    | j o               | 0-5                 | 90-100<br> 90-100<br> 40-75 | 85-100<br> 35-70      | 80-100<br> 20-40    | 70-90<br> 10-20     | 20-60<br> 65-85     | 30-70<br> 30-70<br> 12-25 | 5-15<br>  3-10    |
|                               | İ                   | gravelly loamy coarse sand                                                                                                           | į                 | İ                   | İ                           | j                     | j                   | İ                   | j                   | İ                         | İ                 |
|                               | 14-60<br> <br> <br> | Extremely gravelly loamy<br>  coarse sand, extremely<br>  gravelly coarse sand, very<br>  gravelly sand, very gravelly               | 0-5<br> <br> <br> | 10-25<br> <br> <br> | 15-55<br> <br> <br>         | 10-50<br> <br> <br>   | 10-30<br> <br> <br> | 0-15<br> <br> <br>  | 80-98<br> <br> <br> | 2-20<br> <br> <br>        | 0-5<br> <br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | <br>  Depth    | USDA texture                                                                                                                                                                                                                                                             | Fragn<br> <br>  >10                      | nents                        |                                                     | entage pa<br>e number                               |                                                   |                                                  | <br> Sand                                          | <br>  Silt                                        | <br>  Clay                                      |
|--------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------|-----------------------------------------------------|-----------------------------------------------------|---------------------------------------------------|--------------------------------------------------|----------------------------------------------------|---------------------------------------------------|-------------------------------------------------|
| and son name             |                | <br>                                                                                                                                                                                                                                                                     | inches                                   |                              | <br>  4                                             | 10                                                  | 40                                                | 200                                              | -                                                  |                                                   |                                                 |
|                          | <br>  In.      |                                                                                                                                                                                                                                                                          | Pct.                                     | Pct.                         | <br> <br>                                           |                                                     |                                                   |                                                  | Pct.                                               | Pct.                                              | Pct.                                            |
| 672:                     | ŀ              | <br>                                                                                                                                                                                                                                                                     | İ                                        | l<br>I                       | i                                                   | 1                                                   |                                                   |                                                  |                                                    | 1                                                 | ŀ                                               |
| Soldotna                 | 0-4            | Moderately decomposed<br>  plant material                                                                                                                                                                                                                                | <br> <br>                                | <br> <br>                    | i                                                   | ļ                                                   | ļ                                                 | ļ                                                | ļ                                                  | ļ                                                 |                                                 |
|                          |                | Very fine sandy loam, silt loam                                                                                                                                                                                                                                          |                                          | 0                            | 100                                                 | 100                                                 | 80-95                                             | 45-75                                            | 30-65                                              | 40-65                                             | 0-5                                             |
|                          |                | Silt loam, very fine sandy loam<br>Gravelly silt loam, very<br>I fine sandy loam, silt loam                                                                                                                                                                              | 0<br>  0                                 | 0<br>  0<br>                 | 100<br> 60-100                                      | 100<br> 45-100                                      | 80-95<br> 40-90                                   | 45-75<br> 20-75                                  | 30-65<br> 30-65<br>                                | 40-65<br> 40-65                                   | 0-5<br>  0-5<br>                                |
|                          | 29-60<br> <br> | Very gravelly sand, stratified<br>  very gravelly sand to silt loam,<br>  very gravelly loamy sand                                                                                                                                                                       | 0<br> <br>                               | 0-15<br> <br>                | <br> 50-70<br> <br>                                 | 40-60<br>                                           | 20-55                                             | 4-35<br> <br>                                    | 45-95<br> <br>                                     | 5-55<br> <br>                                     | 0-5<br> <br>                                    |
| Nikolai                  |                | <br> Peat                                                                                                                                                                                                                                                                | ļ                                        | <br>                         |                                                     |                                                     |                                                   |                                                  |                                                    |                                                   |                                                 |
|                          |                | Muck                                                                                                                                                                                                                                                                     |                                          |                              |                                                     |                                                     |                                                   |                                                  |                                                    |                                                   |                                                 |
|                          | <br> <br> <br> | Gravelly fine sandy loam,<br>  gravelly silt loam, gravelly<br>  very fine sandy loam, fine<br>  sandy loam, silt loam,<br>  very fine sandy loam<br>  Very gravelly loamy sand, very<br>  gravelly sand, loamy sand,<br>  sand, gravelly sand,<br>  gravelly loamy sand | 0<br> <br> <br> <br> <br> <br> <br> <br> | <br> <br> <br>               | 70-100<br> <br> <br> <br> <br> <br> 55-100<br> <br> | 60-100<br> <br> <br> <br> <br> <br> 45-100<br> <br> | 55-95<br> <br> <br> <br> <br> <br> 30-75<br> <br> | 30-85<br> <br> <br> <br> <br> <br> 5-35<br> <br> | 20-65<br> <br> <br> <br> <br> <br> 75-100<br> <br> | 30-75<br> <br> <br> <br> <br> <br>  0-20<br> <br> | 3-10<br> <br> <br> <br> <br> <br>  0-5<br> <br> |
| 673:                     |                | I<br>I                                                                                                                                                                                                                                                                   | <br>                                     | !<br>                        | !<br>                                               |                                                     | i<br>i                                            |                                                  | İ                                                  |                                                   |                                                 |
| Spenard                  | 14-25          | Peat, mucky peat  Silt loam, very fine sandy loam  Silt loam, very fine sandy loam  Silt loam, gravelly loam,   loam, gravelly silty clay loam                                                                                                                           |                                          | <br>  0<br>  0<br>  0-15<br> | <br>  100<br>  100<br> 75-95<br>                    | <br>  100<br>  100<br> 65-90                        | <br> 85-95<br> 85-95<br> 60-85                    | <br> 55-80<br> 55-80<br> 45-80                   | <br> 25-55<br> 25-55<br> 15-40                     | <br> 40-65<br> 40-65<br> 45-75                    | <br>  5-10<br>  5-10<br>  5-30                  |
| 674:                     | İ              |                                                                                                                                                                                                                                                                          | ļ                                        | ĺ                            | <u> </u>                                            | İ                                                   | ĺ                                                 | Ì                                                | İ                                                  | İ                                                 | İ                                               |
| Spenard                  | 9-14<br> 14-25 | <br>  Mucky peat, peat<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loam, gravelly loam, gravelly<br>  silty clay loam, silt loam                                                                                                         |                                          | <br>  0<br>  0<br>  0-15     | <br>  100<br>  100<br> 75-95                        | <br>  100<br>  100<br> 65-90                        | <br> 85-95<br> 85-95<br> 60-85                    | <br> 55-80<br> 55-80<br> 45-80                   | <br> 25-55<br> 25-55<br> 15-40                     | <br> 40-65<br> 40-65<br> 45-75                    | <br>  5-10<br>  5-10<br>  5-30                  |
| 675:                     | <br>           | <br>                                                                                                                                                                                                                                                                     | <br>                                     | <br>                         | <br>                                                |                                                     | l<br>I                                            |                                                  | -                                                  |                                                   | <br>                                            |
| Spenard                  | 9-14<br> 14-25 | Mucky peat, peat<br> Very fine sandy loam, silt loam<br> Silt loam, very fine sandy loam<br> Loam, silt loam, gravelly silty<br>  clay loam, gravelly loam                                                                                                               |                                          | <br>  0<br>  0<br>  0-15<br> | <br>  100<br>  100<br> 75-95<br>                    | <br>  100<br>  100<br> 65-90                        | <br> 85-95<br> 85-95<br> 60-85                    | <br> 55-80<br> 55-80<br> 45-80                   | <br> 25-55<br> 25-55<br> 15-40                     | <br> 40-65<br> 40-65<br> 45-75                    | <br>  5-10<br>  5-10<br>  5-30                  |
| 676:                     | ŀ              | i<br>i                                                                                                                                                                                                                                                                   | i                                        | i<br>i                       | i                                                   | i                                                   |                                                   | 1                                                |                                                    | l                                                 | ŀ                                               |
| Starichkof               |                | Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                            | <br> <br>                                | <br> <br>                    | <br> <br>                                           |                                                     | <br>                                              | <br>                                             |                                                    | <br>                                              | <br> <br>                                       |
| Doroshin                 |                | <br> Mucky peat<br> Silt loam, very fine sandy loam                                                                                                                                                                                                                      | <br> <br>  0                             | <br> <br>  0                 | <br> <br>  100                                      | <br> <br> 90-100                                    | <br> <br> 85-90                                   | <br> <br> 70-85                                  | <br> <br> 25-55                                    | <br> <br> 35-75                                   | <br> <br> 0-5                                   |
| 677:<br>Starichkof       | 1 .            | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                       | <br> <br>                                | <br> <br>                    | <br> <br>                                           | <br> <br> <br>                                      | <br> <br> <br>                                    | <br> <br>                                        | <br> <br>                                          | <br> <br>                                         | <br> <br>                                       |
| 678:<br>Starichkof       |                | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand<br>                                                                                                                                                                                                   | <br> <br> <br> <br>                      | <br> <br> <br> <br>          | <br> <br> <br>                                      | <br> <br> <br>                                      | <br> <br> <br>                                    | <br> <br>                                        | <br> <br>                                          | <br> <br>                                         | <br> <br> <br>                                  |

Table 9. Engineering Sieve Data—Continued

| Map symbol                   | <br>  Depth               | USDA texture                                                                                                                                                                                                                                                                                                                  | Fragn<br>                  |                                   |                                                     | entage pa<br>e numbei                               |                                                   |                                         | <br>  Sand                              | <br>  Silt                              | <br>  Clay                             |
|------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------|-----------------------------------------------------|-----------------------------------------------------|---------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|
| and soil name                | <br>                      | <br>                                                                                                                                                                                                                                                                                                                          | >10<br> inches             | 3-10<br> inches                   | <br>  4                                             | 10                                                  | 40                                                | 200                                     | _ <br>                                  |                                         | <br>                                   |
|                              | <br>  In.                 | <u> </u>                                                                                                                                                                                                                                                                                                                      | Pct.                       | Pct.                              | <br>                                                | ļ                                                   | <br>                                              |                                         | Pct.                                    | Pct.                                    | Pct.                                   |
| 679:<br>Starichkof, forested | <br> <br>  0-7<br>  7-60  | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                                                                            | <br> <br>                   <br> <br>                                         | <br> <br>                               | <br> <br>                               | <br> <br>                               | <br> <br>                              |
| 680:<br>Starichkof           |                           | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                                                                            | <br> <br> <br>             | <br> <br>                         | <br> <br> <br>                                      | <br> <br>                                           | <br> <br>                                         | <br> <br>                               | <br> <br>                               | <br> <br>                               | <br> <br>                              |
| Slikok                       | 13-51                     | <br> Peat<br> Silt loam, mucky silt loam<br> Silt loam, very gravelly<br>  sandy loam, gravelly silt<br>  loam, gravelly fine sandy<br>  loam, fine sandy loam                                                                                                                                                                | <br> <br>  0<br>  0<br>    | <br> <br>  0<br> 0-15<br>         | <br> <br>  100<br> 55-90<br> <br>                   | <br> <br>  100<br> 50-85<br> <br>                   | <br> <br> 90-97<br> 50-80<br> <br>                | <br> <br> 70-85<br> 30-70<br> <br>      | <br> <br> 20-45<br> 20-55<br> <br>      | <br> <br> 50-75<br> 40-70<br> <br>      | <br> <br> 5-10<br> 0-10<br> <br>       |
| Naptowne                     | <br> <br>  3-14<br> 13-20 | Slightly decomposed   plant material, moderately   decomposed plant material   Silt loam, very fine sandy loam   Silt loam, very fine sandy loam   Gravelly very fine sandy loam, very cobbly silt loam, very   gravelly sandy loam, very   gravelly fine sandy loam, very gravelly fine sandy loam, very gravelly loam, sand | j 0                        | <br> <br>  0<br>  0<br>  0-40<br> | <br> <br> <br> 85-100<br> 85-100<br> 50-85<br> <br> | <br> <br> <br> 80-100<br> 80-100<br> 35-75<br> <br> | <br> <br> <br> 75-95<br> 75-95<br> 30-70<br> <br> | <br> <br> 40-75<br> 45-75<br> 10-45<br> | <br> <br> 20-50<br> 20-50<br> 40-85<br> | <br> <br> 45-75<br> 45-75<br> 10-55     | <br> <br> <br> 3-10<br> 3-5<br> <br>   |
| 681:<br>Starichkof           |                           | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                                                                                                                                                                                                                                            | <br> <br> <br>             | <br> <br>                         | <br> <br> <br>                                      | <br> <br>                                           | <br> <br>                                         | <br> <br>                               | <br> <br>                               | <br> <br>                               | <br> <br>                              |
| Spenard                      | 9-14<br> 14-25            | Peat, mucky peat Very fine sandy loam, silt loam Silt loam, very fine sandy loam Loam, silt loam, gravelly loam, gravelly silty clay loam                                                                                                                                                                                     | j 0                        | <br> <br>  0<br>  0<br>  0-15     | <br> <br>  100<br>  100<br> 75-95                   | <br> <br>  100<br>  100<br> 65-90                   | <br> <br> 85-95<br> 85-95<br> 60-85               | <br> <br> 55-80<br> 55-80<br> 45-80     | <br> <br> 25-55<br> 25-55<br> 15-40     | <br> <br> 40-65<br> 40-65<br> 45-75     | 5-10                                   |
| 682:                         | <br>                      | <br>                                                                                                                                                                                                                                                                                                                          | <br>                       | <br>                              | <br>                                                | <br>                                                | <br>                                              |                                         |                                         |                                         | <br>                                   |
| Susitna                      | <br>  2-3<br>  3-45       | Moderately decomposed<br>  plant material<br> Fine sandy loam, silt loam<br> Stratified fine sand to silt loam<br> Extremely gravelly coarse<br>  sand, very gravelly sand,<br>  very gravelly loamy sand                                                                                                                     | <br> <br>  0<br>  0<br>  0 | <br> <br>  0<br>  0<br>  0-20<br> | <br> <br>  100<br>  100<br> 40-60<br>               | <br> <br>  100<br>  100<br> 20-55<br>               | <br> <br> 85-95<br> 80-95<br> 10-30<br>           | <br> <br> 65-75<br> 30-90<br>  2-15<br> | <br> <br> 30-55<br> 10-85<br> 80-98<br> | <br> <br> 45-70<br>  5-80<br>  0-15<br> | <br> <br>  0-10<br>  0-10<br>  0-5<br> |
| Riverwash                    | <br>                      | <br>                                                                                                                                                                                                                                                                                                                          | <br>                       | <br>                              | <br>                                                |                                                     | <br>                                              |                                         |                                         |                                         |                                        |
| 683:<br>Susitna              | <br> <br> 0-2             | <br> <br> Moderately decomposed                                                                                                                                                                                                                                                                                               | <br> <br>                  | <br>                              | <br> <br>                                           | <br>                                                | <br>                                              |                                         |                                         |                                         |                                        |
|                              |                           | plant material<br> Fine sandy loam, silt loam<br> Stratified fine sand to silt loam<br> Very gravelly loamy sand,<br>  extremely gravelly coarse<br>  sand, very gravelly sand                                                                                                                                                | <br>  0<br>  0<br>  0<br>  | <br>  0<br>  0<br>  0-20<br>      | <br>  100<br>  100<br> 40-60<br> <br>               | <br>  100<br>  100<br> 20-55<br>                    | <br> 85-95<br> 80-95<br> 10-30<br>                | <br> 65-75<br> 30-90<br>  2-15<br>      | <br> 30-55<br> 10-85<br> 80-98<br>      | <br> 45-70<br>  5-80<br>  0-15<br>      | <br>  0-10<br>  0-10<br>  0-5<br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name     | <br>  Depth              | USDA texture                                                                                                  | Fragn<br> <br>  >10   | nents                    |                          | entage pa<br>e numbei    |                           |                        | <br>  Sand<br>             | <br>  Silt               | <br>  Clay              |
|------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------|--------------------------|--------------------------|---------------------------|------------------------|----------------------------|--------------------------|-------------------------|
| and sommanic                 | ļ                        |                                                                                                               | inches                |                          | 4                        | 10                       | 40                        | 200                    | -                          | ļ                        |                         |
|                              | <br>  In.                |                                                                                                               | Pct.                  | <br>  Pct.               | <br> <br>                |                          |                           | ·                      | Pct.                       | Pct.                     | Pct.                    |
| 684:<br>Talkeetna            | 0-2                      | <br> <br> Slightly decomposed<br>  plant material                                                             | <br> <br>             | <br> <br>                | <br> <br>                |                          |                           |                        |                            |                          |                         |
|                              | 2-7                      | Silt loam, mucky silt<br>  Ioam, very fine sandy loam                                                         | <br>  0<br>           | <br>  0<br>              | <br> 90-100<br>          | <br> 85-100<br>          | <br> 75-95<br>            | <br> 55-80<br>         | <br> 25-55<br>             | <br> 40-65<br>           | 0-10                    |
|                              | 7-19                     | <br> Mucky very fine sandy loam,<br>  loam, mucky silt loam,<br>  silt loam                                   | <br>  0<br>           | <br>  0<br>              | <br> 90-100<br>          | <br> 85-100<br>          | <br> 75-95<br>            | <br> 55-80<br>         | <br> 25-55<br>             | <br> 40-65<br>           | 0-10                    |
|                              | <br> 19-60<br> <br> <br> | Very gravelly fine sandy<br>  loam, very cobbly sandy<br>  loam, very gravelly sandy<br>  loam                | <br>  0<br> <br> <br> | <br>  7-30<br> <br> <br> | <br> 45-70<br> <br> <br> | <br> 30-65<br> <br> <br> | <br> 20-50<br> <br> <br>  | 10-30<br> <br> <br>    | <br> 55-75<br> <br> <br>   | <br> 20-40<br> <br> <br> | <br>  0-5<br> <br> <br> |
| 685:<br>Talkeetna            | <br>  0-2                | <br> Slightly decomposed                                                                                      | <br>                  | <br>                     | <br>                     | <br>                     | <br>                      | ļ<br>                  | <br>                       | <br>                     | <br>                    |
|                              | 2-7                      | plant material<br> Very fine sandy loam, mucky<br>  silt loam, silt loam                                      | <br>  0<br>           | <br>  0<br>              | <br> 90-100              | <br> 85-100              | <br> 75-95                | <br> 55-80             | <br> 25-55                 | <br> 40-65               | 0-10                    |
|                              | 7-19                     | Mucky silt loam, loam, mucky<br>  very fine sandy loam, silt loam                                             | <br>  0<br>           | <br>  0<br>              | <br> 90-100<br>          | 85-100                   | <br> 75-95                | <br> 55-80             | <br> 25-55<br>             | <br> 40-65<br>           | 0-10                    |
|                              | 19-60<br> <br>           | Very gravelly sandy loam,<br>  very cobbly sandy loam,<br>  very gravelly fine sandy loam                     | 0<br> <br>            | 7-30<br> <br>            | <br> 45-70<br> <br>      | 30-65                    | 20-50                     | 10-30                  | 55-75<br> <br>             | 20-40                    | 0-5                     |
| 686:<br>Talkeetna            | 0-2                      | <br> <br> Slightly decomposed                                                                                 | <br> <br>             | <br> <br>                | <br> <br>                |                          |                           |                        |                            |                          |                         |
|                              | 2-7                      | plant material<br> Very fine sandy loam, mucky                                                                | <br>  0               | <br>  0                  | <br> 90-100              | <br> 85-100              | <br> 75-95                | <br> 55-80             | <br> 25-55                 | <br> 40-65               | 0-10                    |
|                              | <br>  7-19<br>           | silt loam, silt loam  Mucky very fine sandy   loam, loam, mucky silt                                          | <br>  0<br>           | <br>  0<br>              | <br> 90-100<br>          | <br> 85-100<br>          | <br> 75-95<br>            | <br> 55-80<br>         | <br> 25-55<br>             | <br> 40-65<br>           | 0-10                    |
|                              | <br> 19-60<br> <br>      | loam, silt loam<br> Very gravelly sandy loam,<br>  very cobbly sandy loam, very<br>  gravelly fine sandy loam | <br>  0<br> <br>      | <br>  7-30<br> <br>      | <br> 45-70<br> <br>      | <br> 30-65<br> <br>      | <br> 20-50<br> <br>       | <br> 10-30<br> <br>    | <br> 55-75<br> <br>        | <br> 20-40<br> <br>      | <br> 0-5<br>            |
| Starichkof                   | 0-7<br>  7-60            | <br> Peat<br> Stratified mucky peat<br>  to silt loam to ashy sand                                            | <br> <br>             | <br> <br>                | <br> <br>                | <br>                     | <br>                      |                        |                            | <br>                     | <br> <br>               |
| 687:<br>Tangerra             | 0-4                      | <br> <br> Moderately decomposed<br>  plant material                                                           | <br> <br>             | <br> <br>                | <br> <br>                |                          |                           |                        |                            |                          |                         |
|                              |                          | Very fine sandy loam, silt loam<br> Silt loam, sandy loam, loam<br> Gravelly sand, sand,                      | 0<br>  0<br>  0       | 0<br>  0<br>  0-8        | 100<br>  100<br>  75-100 | 100<br>  100<br> 70-100  | 80-90<br> 65-85<br> 45-75 | 50-80<br>30-75<br>6-35 | 25-60<br> 25-75<br> 70-100 | 35-65<br>20-65<br>0-30   | 5-10<br>5-10<br>0-5     |
|                              | į                        | loamy sand<br>Very gravelly sand,<br>very gravelly loamy sand                                                 | <br>  0<br>           | <br>  0-6<br>            | <br> 45-65<br>           | <br> 30-55<br>           | <br> 20-40<br>            | 3-15                   | <br> 80-100<br>            | 0-15                     | 0-5                     |
| 688:<br>Beaches, tidal flats |                          | <br>                                                                                                          | <br> <br> <br>        | <br> <br>                | <br> <br>                | <br>                     | <br>                      |                        |                            | <br>                     | <br> <br> <br>          |
| 689:<br>Tlikakila            | <br>  0-1                | <br> Moderately decomposed<br>  plant material                                                                | <br>                  | j<br>                    | j<br>                    | <br>                     | <br>                      | <br>                   | <br>                       | <br>                     | <br>                    |
|                              | <br>  1-19<br> 19-34     | Silt loam, very fine sandy loam Gravelly sandy loam,                                                          | <br>  0<br>  0        | <br>  0<br>  0-10        | <br>  100<br> 75-100     | <br> 85-100<br> 70-100   | <br> 70-95<br> 45-75      | <br> 45-80<br> 20-50   | <br> 25-55<br> 55-80       | <br> 40-70<br> 10-45     | 0-5                     |
|                              | <br> 34-60<br>           | sandy loam, fine sandy loam Gravelly loamy sand, very gravelly sand                                           | <br>  0<br>           | <br>  0-15<br>           | <br> 50-75<br>           | <br> 35-75<br>           | <br> 20-55<br>            | <br>  3-15<br>         | <br> 80-95<br>             | <br> 5-15<br>            | <br> 0-5<br>            |

Table 9. Engineering Sieve Data—Continued

| Map symbol    | <br>  Depth         | USDA texture                                                                                      | Fragn<br>          |                     |                      | entage pa<br>e numbei |                     |                     | <br>  Sand          | <br>  Silt          | <br>  Clay         |
|---------------|---------------------|---------------------------------------------------------------------------------------------------|--------------------|---------------------|----------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| and soil name |                     |                                                                                                   | >10<br> inches     | 3-10<br> inches     | <br>  4              | 10                    | 40                  | 200                 | - <br>              |                     |                    |
|               | <br>  In.           |                                                                                                   | <br>  Pct.         | <br>  Pct.          | <br>                 |                       |                     |                     | <br>  Pct.          | <br>  Pct.          | Pct.               |
| 690:          |                     | ]                                                                                                 | <br>               | <br>                | <br>                 |                       |                     |                     |                     |                     |                    |
| Tlikakila     | 0-1                 | Moderately decomposed<br>  plant material                                                         |                    |                     | ļ                    |                       |                     |                     | ļ                   |                     |                    |
|               | 1-19                | Very fine sandy loam, silt loam                                                                   | 0                  | 0                   | 1 100                | <br> 85-100           | 70-95               | <br> 45-80          | 25-55               | 40-70               | 0-5                |
|               | 19-34               | Fine sandy loam, sandy<br>  loam, gravelly sandy loam                                             | [ 0<br>[           | 0-10                | 75-100               | 70-100                | 45-75               | 20-50               | 55-80<br>           | 10-45               | 0-10               |
|               | 34-60               | Very gravelly sand,<br>  gravelly loamy sand                                                      | 0<br>              | 0-15                | 50-75<br>            | 35-75<br>             | 20-55               | 3-15<br>            | 80-95               | 5-15                | 0-5<br>            |
| 691:          | <br>                | <br>                                                                                              | <br>               | <u> </u>            | <br>                 |                       |                     |                     |                     |                     | <br>               |
| Tlikakila     | 0-1<br>             | Moderately decomposed<br>  plant material                                                         | j<br>I             | <br>                | <br>                 | <br>                  | j                   | j                   | j                   | <br>                | j                  |
|               |                     | Silt loam, very fine sandy loam                                                                   |                    | 0                   | 100                  | 85-100                | 70-95               | 45-80               | 25-55               | 40-70               | 0-5                |
|               | 19-34<br>           | Sandy loam, fine sandy<br>  loam, gravelly sandy loam                                             | 0<br>              | 0-10<br>            | 75-100<br>           | 70-100<br>            | 45-75<br>           | 20-50<br>           | 55-80<br>           | 10-45<br>           | 0-10<br>           |
|               | 34-60               | Very gravelly sand,<br>  gravelly loamy sand                                                      | 0<br>              | 0-15                | 50-75                | 35-75                 | 20-55               | 3-15                | 80-95               | 5-15                | 0-5                |
| 692:          |                     | <br>                                                                                              | <br>               | l<br>I              | <br>                 |                       | <br>                |                     |                     |                     |                    |
| Tokositna     | 0-2                 | Slightly decomposed                                                                               | ļ                  |                     | ļ                    | ļ                     |                     |                     | ļ                   | ļ                   | ļ                  |
|               | 2-13                | Mucky silt loam, silt                                                                             | 0                  | 0                   | 90-100               | 85-100                | 75-95               | 55-80               | 25-55               | 40-65               | 0-10               |
|               | 13-24               | loam, very fine sandy loam<br> Silt loam, very fine                                               | 0                  | 0                   | <br> 90-100          | <br> 85-100           | <br> 75-95          | <br> 55-80          | <br> 25-55          | 40-65               | 0-10               |
|               | <br> 24-60<br>      | sandy loam, sandy loam<br>Very cobbly loam, very<br>cobbly sandy loam,<br>very gravelly loam      | <br>  0-6<br> <br> | <br>  0-35<br> <br> | <br> 50-80<br> <br>  | <br> 30-75<br> <br>   | <br> 25-65<br> <br> | <br> 15-50<br> <br> | <br> 40-70<br> <br> | <br> 25-40<br>      | <br>  0-10<br>     |
| 693:          | į                   |                                                                                                   | ĺ                  |                     | ĺ                    | İ                     | İ                   | ļ                   | į                   | İ                   | İ                  |
| Tokositna     | 0-2                 | <br> Slightly decomposed                                                                          | <br>               |                     | <br>                 |                       |                     |                     |                     |                     |                    |
|               | 2-13                | plant material<br> Mucky silt loam, silt                                                          | <br>  0            | 0                   | <br> 90-100          | <br> 85-100           | <br> 75-95          | <br> 55-80          | <br> 25-55          | <br> 40-65          | 0-10               |
|               | <br> 13-24          | loam, very fine sandy loam<br>Silt loam, very fine                                                | <br>  0            | <br>  0             | <br> 90-100          | <br> 85-100           | <br> 75-95          | <br> 55-80          | <br> 25-55          | <br> 40-65          | <br> 0-10          |
|               | <br> 24-60<br>      | sandy loam, sandy loam<br>Very cobbly sandy loam,<br>very cobbly loam, very<br>gravelly loam      | <br>  0-6<br>      | <br>  0-35<br> <br> | <br> 50-80<br> <br>  | <br> 30-75<br> <br>   | <br> 25-65<br> <br> | <br> 15-50<br>      | <br> 40-70<br>      | <br> 25-40<br>      | <br> 0-10<br>      |
| 694:          |                     |                                                                                                   |                    | <br>                |                      |                       |                     |                     |                     |                     |                    |
| Tokositna     | 0-2                 | <br> Slightly decomposed<br>  plant material                                                      |                    |                     |                      |                       |                     |                     |                     |                     |                    |
|               | 2-13                | Mucky silt loam, silt                                                                             | 0                  | 0                   | 90-100               | 85-100                | 75-95               | 55-80               | 25-55               | 40-65               | 0-10               |
|               | 13-24               | loam, very fine sandy loam<br>Silt loam, very fine                                                | 0                  | 0                   | <br> 90-100          | 85-100                | <br> 75-95          | 55-80               | 25-55               | 40-65               | 0-10               |
|               | <br> 24-60<br> <br> | sandy loam, sandy loam<br> Very cobbly sandy loam, very<br>  cobbly loam, very gravelly<br>  loam | <br>  0-6<br>      | <br>  0-35<br>      | <br> 50-80<br> <br>  | <br> 30-75<br> <br>   | <br> 25-65<br> <br> | <br> 15-50<br> <br> | <br> 40-70<br> <br> | <br> 25-40<br>      | <br> 0-10<br>      |
| 695:          | <br>                | <br>                                                                                              | <br>               | <br>                | <br>                 |                       |                     | 1                   |                     |                     | <br>               |
| Truuli        | 0-9<br>  9-19       | <br> Mucky peat, peat, muck<br> Mucky silt loam, silt                                             | <br>  0            | <br>  0             | <br>  100            | <br> 85-100           | <br> 80-95          | <br> <br> 55-85     | <br> 25-70          | <br> 30-70          | <br>  0-5          |
|               | <br> 19-43          | loam, very fine sandy loam<br>Fine sandy loam, silt loam                                          | <br>  0            | <br>  0-10          | <br> 85-100          | <br> 80-100           | <br> 75-95          | <br> 55-85          | <br> 20-50          | <br> 45-75          | <br>  3-10         |
|               |                     | Fine sandy loam, slit loam<br> Sandy loam, gravelly<br>  sandy loam, loamy sand                   | 0<br>  0<br>       | 0-10<br>  0-8<br>   | 85-100<br> 60-90<br> | 55-85<br>             | 75-95<br> 35-70<br> | 55-85<br> 15-40<br> | 20-50<br> 50-80<br> | 45-75<br> 10-50<br> | 3-10<br>  0-10<br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol and soil name | <br>  Depth              | USDA texture                                                                                                                               | Fragm<br> <br>  >10   | nents                    |                          | entage pa<br>e number         |                               |                          | <br>  Sand               | <br>  Silt               | <br>  Clay               |
|--------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------|--------------------------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| anu son name             |                          | <br>                                                                                                                                       | > 10<br> inches       |                          | 4                        | 10                            | 40                            | 200                      | - <br> <br>              |                          | <br> <br>                |
|                          | <br>  In.                |                                                                                                                                            | <br>  Pct.            | <br>  Pct.               | <br> <br>                |                               |                               |                          | Pct.                     | Pct.                     | Pct.                     |
| 696:<br>Tutka            | 0-7                      | <br> <br> Moderately decomposed<br>  plant material                                                                                        | <br> <br>             | <br> <br>                | <br> <br>                |                               |                               |                          |                          |                          | <br> <br>                |
|                          | 7-13                     | Very fine sandy loam,                                                                                                                      | 0                     | 0                        | <br> 80-100              | 70-100                        | <br> 65-95                    | 40-80                    | 25-55                    | <br> 45-75               | 0-5                      |
|                          | <br> 13-21<br> <br> <br> | silt loam, mucky silt loam<br> Gravelly mucky silt loam,<br>  gravelly mucky very fine<br>  sandy loam, very gravelly<br>  mucky silt loam | <br>  0<br> <br>      | <br>  0-25<br> <br>      | <br> 35-70<br> <br> <br> | <br> 20-60<br> <br>           | <br> 15-60<br> <br> <br>      | <br> 10-45<br> <br> <br> | <br> 25-55<br> <br> <br> | <br> 35-70<br> <br>      | <br>  0-10<br> <br>      |
|                          | 21-60                    | Bedrock                                                                                                                                    | j<br>i                | j                        | j                        | j                             | j                             | j                        | į                        | j                        | j                        |
| Kasitsna                 | 0-3                      | <br> Moderately decomposed<br>  plant material                                                                                             |                       |                          |                          |                               |                               |                          | ļ                        |                          |                          |
|                          | 3-18                     | Mucky silt loam, very fine<br>  sandy loam, gravelly very<br>  fine sandy loam, silt loam                                                  | 0                     | <br>  0-5<br>            | <br> 50-100<br>          | <br> 40-100<br>               | <br> 30-95<br>                | 20-80                    | 25-60                    | 30-65                    | <br>  3-10<br>           |
|                          | 18-31                    | Loam, sandy loam, gravelly sandy loam, very gravelly                                                                                       | <br>  0<br>           | <br>  0-15<br>           | <br> 50-90<br>           | <br> 35-90<br>                | <br> 30-75<br>                | <br> 15-55<br>           | <br> 40-60<br>           | 30-50                    | 0-10                     |
|                          | <br> 31-60<br> <br>      | sandy loam<br> Very gravelly sandy loam,<br>  very cobbly sandy loam,<br>  very gravelly loam                                              | <br>  0<br> <br>      | <br>  5-25<br> <br>      | <br> 50-70<br> <br>      | <br> 40-60<br> <br>           | <br> 30-50<br> <br>           | <br> 15-35<br> <br>      | <br> 40-70<br> <br>      | 20-50                    | <br>  0-10<br> <br>      |
| Rock outcrop             | <br> <br>                | <br> <br>                                                                                                                                  | <br> <br>             | <br> <br>                | <br> <br>                | <br> <br>                     | <br> <br>                     | <br> <br>                | <br> <br>                | <br>                     | <br> <br>                |
| 697:<br>Tutka            | <br>  0-7                | <br> Moderately decomposed                                                                                                                 | <br>                  | <br>                     | <br>                     | <br>                          |                               | <br>                     | <br>                     |                          | <br>                     |
|                          | <br>  7-13               | plant material<br> Silt loam, mucky silt                                                                                                   | j<br>i 0              | j<br>I 0                 | <br> 80-100              | <br> 70-100                   | <br> 65-95                    | j<br> 40-80              | j<br>125-55              | <br> 45-75               | <br>  0-5                |
|                          | <br> 13-21<br> <br>      | loam, very fine sandy loam<br> Gravelly mucky very fine<br>  sandy loam, gravelly<br>  mucky silt loam, very gravelly                      | <br>  0<br>           | <br>  0-25<br> <br>      | <br> 35-70<br> <br>      | <br> 20-60<br> <br>           | <br> 15-60<br> <br>           | <br> 10-45<br>           | <br> 25-55<br> <br>      | <br> 35-70<br> <br>      | <br>  0-10<br> <br>      |
|                          | 21-60                    | mucky silt loam<br> Bedrock                                                                                                                | <br>                  | <br>                     | <br>                     |                               |                               |                          |                          |                          | <br>                     |
| Portgraham               | İ                        | <br> Slightly decomposed<br>  plant material                                                                                               | <br> <br>             | <br> <br>                | <br> <br>                | <br>                          | <br> <br>                     | <br> <br>                | <br> <br>                |                          | <br> <br>                |
|                          |                          | Very fine sandy loam, silt loam<br> Silt loam, mucky very fine<br>  sandy loam, gravelly silt                                              | 0<br>  0<br>          | 0<br> 0-10<br>           | 100<br> 65-100<br>       | 100<br> 45-100<br>            | 90-100<br> 45-90<br>          | 55-85<br> 25-80<br>      | 25-55<br> 25-50<br>      | 45-70<br> 40-70<br>      | 0-5<br>  0-10<br>        |
|                          | <br> 27-60<br>           | loam, mucky silt loam<br> Bedrock<br>                                                                                                      | <br> <br>             | <br> <br>                | <br> <br>                | <br> <br>                     | <br> <br>                     | <br> <br>                | <br>                     |                          | <br> <br>                |
| 698:<br>Tuxedni          | 0-2                      | <br> Moderately decomposed<br>  plant material                                                                                             | <br>                  | <br>                     | <br> <br>                |                               | <br>                          | <br>                     | <br>                     |                          | <br>                     |
|                          |                          | Silt loam, very fine sandy loam<br> Silt loam, gravelly                                                                                    | 0<br>  0              |                          |                          |                               | 55-95<br> 55-90               | 35-80<br>35-85           | 25-55<br>20-55           | 40-65<br> 40-75          | 0-10<br>3-10             |
|                          | <br> 36-60<br> <br> <br> | sandy loam, sandy loam [Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam                          | <br>  0<br> <br> <br> | <br>  0-30<br> <br> <br> | <br> 50-80<br> <br> <br> | <br> 40-75<br> <br> <br> <br> | <br> 24-60<br> <br> <br> <br> | <br> 10-40<br> <br> <br> | <br> 50-80<br> <br> <br> | <br> 10-50<br> <br>      | <br>  0-10<br> <br> <br> |
| 699:<br>Tuxedni          | 0-2                      | <br> -<br> Moderately decomposed                                                                                                           | <br>                  | <br> <br>                | <br>                     |                               | <br>                          |                          |                          |                          | <br>                     |
|                          |                          | plant material<br> Very fine sandy loam, silt loam<br> Silt loam, gravelly                                                                 | <br>  0<br>  0        |                          |                          |                               | <br> 55-95<br> 55-90          | <br> 35-80<br> 35-85     | <br> 25-55<br> 20-55     | <br> 40-65<br> 40-75     | <br>  0-10<br>  3-10     |
|                          | <br> 36-60<br> <br> <br> | sandy loam, sandy loam<br> Gravelly sandy loam, very<br>  gravelly sandy loam, very<br>  cobbly loamy sand, very<br>  gravelly loam        | <br>  0<br> <br> <br> | <br>  0-30<br> <br>      | <br> 50-80<br> <br> <br> | <br> 40-75<br> <br> <br>      | <br> 24-60<br> <br> <br>      | <br> 10-40<br> <br> <br> | <br> 50-80<br> <br> <br> | <br> 10-50<br> <br> <br> | <br>  0-10<br> <br> <br> |

Table 9. Engineering Sieve Data—Continued

| Map symbol                 | <br>  Depth                  | USDA texture                                                                                                                                       | Fragm                     |                              |                                     | entage pa<br>e numbei          |                               |                              | <br>  Sand                     | <br>  Silt              | Clay                         |
|----------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------------------------|--------------------------------|-------------------------------|------------------------------|--------------------------------|-------------------------|------------------------------|
| and soil name              | <br> <br>                    | <br>                                                                                                                                               | >10<br> inches            | 3-10<br> inches              | <br>  4                             | 10                             | 40                            | 200                          | - <br> <br>                    | <br> <br>               | <br>                         |
|                            | In.                          |                                                                                                                                                    | Pct.                      | Pct.                         | !<br>!                              | <u> </u>                       | ļ                             |                              | Pct.                           | Pct.                    | Pct.                         |
| 00:                        | <br>                         | <br>                                                                                                                                               | <br>                      |                              | <br>                                |                                | <br>                          |                              |                                |                         | <br>                         |
| Гuxedni, warm              | 0-2<br>                      | Moderately decomposed<br>  plant material                                                                                                          | <br>                      | <br>                         | <br>                                |                                | <br>                          |                              |                                |                         | <br>                         |
|                            |                              | Very fine sandy loam, silt loam<br> Silt loam, gravelly<br>  sandy loam, sandy loam                                                                | 0<br>  0<br>              | 0<br>0-10                    | 70-100<br>70-100                    | 60-100<br> 65-100              | 55-95<br> 55-90               | 35-80<br>35-85               | 25-55<br>20-55                 | 40-65<br> 40-75         | 0-10                         |
|                            | 36-60<br> <br> <br>          | Gravelly sandy loam, very gravelly sandy loam, very gravelly loam, very cobbly loamy sand                                                          | <br> <br> <br> <br>       | 0-30<br> <br>                | 50-80<br> <br> <br>                 | 40-75<br> <br> <br> <br>       | 24-60<br> <br> <br>           | 10-40<br> <br> <br>          | 50-80<br> <br> <br>            | 10-50                   | 0-10                         |
| 01:<br>Typic Cryaquents    | <br> <br>  0-2               | <br> <br> Slightly decomposed                                                                                                                      | <br> <br>  <b></b>        | <br> <br>                    | <br> <br>                           | <br>                           |                               |                              |                                | <br> <br>               | <br> <br>                    |
| ypio eryaqueme             | İ                            | plant material<br> Very fine sandy loam, silt                                                                                                      | <br> <br>  0              | <br> <br>  0                 | <br> <br>  100                      | 100                            | <br> 85-95                    | <br> 45-75                   | 120.65                         | <br> 35-65              | 0-30                         |
|                            | İ                            | loam, silty clay loam                                                                                                                              | İ                         |                              | İ                                   | İ                              | İ                             | j                            | 20-65<br>                      | j                       | İ                            |
|                            | 6-60<br> <br> <br> <br> <br> | Gravelly sandy loam, very<br>  gravelly sandy loam, very<br>  cobbly loamy sand, very<br>  gravelly sand, silt loam, very<br>  gravelly loamy sand | 0<br> <br> <br> <br> <br> | 0-15<br> <br> <br> <br> <br> | 50-100<br> <br> <br> <br> <br> <br> | 35-100<br> <br> <br> <br> <br> | 20-90<br> <br> <br> <br> <br> | 3-75<br> <br> <br> <br> <br> | 20-100<br> <br> <br> <br> <br> | 0-60<br> <br> <br> <br> | 0-25<br> <br> <br> <br> <br> |
| 02:<br>ypic Cryopsamments- | <br>  0-60<br>               | <br> Loamy sand, sand, loamy<br>  fine sand                                                                                                        | <br>  0<br>               | <br>  0<br>                  | <br>  100<br>                       | 100                            | <br> 75-85<br>                | <br> 15-30<br>               | <br> 80-95<br>                 | 5-20                    | 0-3                          |
| 03:<br>Typic Cryorthents   | <br> <br>  0-1<br>           | <br> <br> Slightly decomposed plant<br>  material, gravelly slightly                                                                               | <br> <br> <br>            | <br> <br>                    | <br> <br> <br>                      | <br> <br>                      | <br> <br>                     |                              |                                | <br>                    | <br> <br>                    |
|                            | <br>  1-33<br>               | decomposed plant material Very fine sandy loam, gravelly very fine sandy                                                                           | <br>  0-4<br>             | <br>  0-15<br>               | <br> 60-100<br>                     | <br> 50-100<br>                | <br> 45-95<br>                | <br> 25-85<br>               | <br> 20-70<br>                 | <br> 30-60<br>          | <br>  0-30<br>               |
|                            | <br> 33-60<br> <br>          | loam, silty clay loam<br> Very fine sandy loam,<br> very gravelly silt loam,<br>  cobbly silty clay loam                                           | <br>  0-4<br> <br>        | <br>  0-25<br> <br>          | <br> 60-100<br> <br>                | <br> 50-100<br> <br>           | <br> 45-95<br> <br>           | <br> 25-80<br> <br>          | <br> 20-60<br> <br>            | <br> 35-70<br> <br>     | <br>  0-30<br> <br>          |
| 04:<br>Jrban land          | <br>                         |                                                                                                                                                    | <br>                      | <br>                         | <br>                                |                                |                               |                              |                                |                         |                              |
| 05:<br>Vater, fresh        | <br> <br>                    | <br>                                                                                                                                               | <br> <br>                 | <br> <br>                    | <br> <br>                           |                                |                               |                              |                                | <br> <br>               | <br> <br> <br>               |
| 06:<br>Vhitsol             | <br> <br>  0-3               | <br> <br> Slightly decomposed<br>  plant material                                                                                                  | <br>                      | <br>                         | <br> <br>                           |                                |                               |                              |                                | <br>                    | <br>                         |
|                            |                              | Very fine sandy loam, silt loam                                                                                                                    |                           | 0                            | 100                                 | 100                            | 80-95                         | 55-80                        | 25-55                          | 40-65                   | 5-10                         |
|                            | 29-51<br> <br> <br>          | Gravelly fine sandy loam,<br>  stratified silt loam to fine<br>  sand, loam, sandy loam,<br>  very fine sandy loam,                                | 0<br> <br> <br>           | 0-15<br> <br> <br>           | 65-100<br> <br> <br>                | 55-100<br> <br> <br>           | 40-80<br> <br> <br>           | 20-55<br> <br> <br>          | 50-75<br> <br> <br>            | 20-45<br> <br> <br>     | 0-10<br> <br> <br>           |
|                            | <br> 51-60<br> <br> <br>     | gravelly sandy loam  Gravelly sand, very   gravelly coarse sand,   extremely gravelly sand,   very gravelly loamy sand                             | <br>  0<br> <br>          | <br>  0-15<br> <br>          | <br> 40-65<br> <br> <br>            | <br> 25-60<br> <br>            | <br> 15-40<br> <br>           | <br> 2-20<br> <br>           | <br> 75-100<br> <br>           | <br> 0-25<br> <br>      | 0-3                          |

Table 9. Engineering Sieve Data—Continued

| Map symbol      | Depth                    | USDA texture                                                                                                                                                                     | Fragm                   |                                 |                               | entage pa<br>e number         |                               |                               | <br>  Sand                | <br>  Silt                    | <br>  Clay              |
|-----------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------|-------------------------------|-------------------------|
| and soil name   | <br>                     | <br>                                                                                                                                                                             | >10<br> inches          | 3-10<br> inches                 | <br>  4                       | 10                            | 40                            | 200                           | -                         |                               | <br>                    |
|                 | <br>  In.                |                                                                                                                                                                                  | <br>  Pct.              | <br>  Pct.                      | <br> <br>                     |                               | <br> <br>                     | ·  <br> <br>                  | Pct.                      | Pct.                          | Pct.                    |
| 707:<br>Whitsol | 0-3                      | <br> <br> Slightly decomposed<br>  plant material                                                                                                                                | <br>                    | <br> <br>                       | <br>                          |                               | <br>                          |                               | <br>                      | <br>                          |                         |
|                 |                          | Frait Hatelian<br>  Very fine sandy loam, silt loam<br>  Gravelly fine sandy loam,<br>  gravelly sandy loam, loam,<br>  stratified silt loam to fine<br>  sand, sandy loam, very | <br>  0<br>  0<br> <br> | <br>  0<br>  0-15<br> <br> <br> | <br>  100<br> 65-100<br> <br> | 100<br> 55-100<br>            | 80-95<br> 40-80<br>           | <br> 55-80<br> 20-55<br> <br> | <br> 25-55<br> 50-75<br>  | <br> 40-65<br> 20-45<br> <br> | 5-10<br>  0-10<br>      |
|                 | <br> 51-60<br> <br> <br> | fine sandy loam<br> Extremely gravelly sand, very<br>  gravelly loamy sand, very<br>  gravelly coarse sand,<br>  gravelly sand                                                   | <br>  0<br> <br> <br>   | <br>  0-15<br> <br> <br> <br>   | <br> 40-65<br> <br> <br> <br> | <br> 25-60<br> <br> <br>      | <br> 15-40<br> <br> <br>      | <br> 2-20<br> <br>            | <br> 75-100<br> <br>      | <br> 0-25<br> <br> <br>       | <br>  0-3<br> <br> <br> |
| 708:<br>Whitsol | <br>-  0-3               | <br> Slightly decomposed                                                                                                                                                         | <br>                    | <br>                            | j<br>                         | j<br>                         | j<br>                         | j<br>                         | <br>                      | <br>                          | <br>                    |
|                 |                          | plant material<br> Very fine sandy loam, silt loam<br> Very fine sandy loam, loam,<br>  gravelly sandy loam, gravelly<br>  fine sandy loam, stratified<br>  silt loam to fine    | <br>  0<br>  0<br> <br> | <br>  0<br>  0-15<br> <br>      | <br>  100<br> 65-100<br> <br> | <br>  100<br> 55-100<br> <br> | <br> 80-95<br> 40-80<br> <br> | <br> 55-80<br> 20-55<br>      | <br> 25-55<br> 50-75<br>  | <br> 40-65<br> 20-45<br> <br> | <br> 5-10<br> 0-10<br>  |
|                 | <br> 51-60<br> <br> <br> | sand, sandy loam  Very gravelly coarse sand,   extremely gravelly sand,   very gravelly loamy sand,   gravelly sand                                                              | <br>  0<br> <br> <br>   | <br>  0-15<br> <br> <br>        | <br> 40-65<br> <br> <br> <br> | <br> 25-60<br> <br> <br>      | <br> 15-40<br> <br> <br>      | <br>  2-20<br> <br> <br>      | <br> 75-100<br> <br>      | <br>  0-25<br> <br> <br>      | <br>  0-3<br> <br> <br> |
| 709:<br>Whitsol | 0-3                      | <br> <br> Slightly decomposed<br>  plant material                                                                                                                                | <br>                    | <br> <br>                       | <br>                          |                               | <br>                          |                               | <br>                      | <br>                          |                         |
|                 |                          | Silt loam, very fine sandy loam<br>Gravelly fine sandy loam,<br>gravelly sandy loam, loam,<br>stratified silt loam to fine<br>sand, sandy loam, very                             | <br>  0<br>  0<br> <br> | 0<br>  0-15<br> <br>            | 100<br> 65-100<br>            | 100<br> 55-100<br>            | 80-95<br> 40-80<br>           | 55-80<br> 20-55<br>           | 25-55<br> 50-75<br>       | 40-65<br> 20-45<br>           | 5-10<br>  0-10<br>      |
|                 | <br> 51-60<br> <br> <br> | fine sandy loam<br> Gravelly sand, very gravelly<br>  coarse sand, very gravelly<br>  loamy sand, extremely<br>  gravelly sand                                                   | <br>  0<br> <br> <br>   | <br>  0-15<br> <br> <br>        | <br> 40-65<br> <br> <br> <br> | <br> 25-60<br> <br> <br> <br> | <br> 15-40<br> <br> <br>      | 2-20                          | <br> 75-100<br> <br> <br> | <br>  0-25<br> <br> <br>      | <br> 0-3<br> <br> <br>  |
| 710:<br>Whitsol | 0-3                      | <br> <br> Slightly decomposed                                                                                                                                                    | <br>                    | <br>                            | <br>                          |                               | <br>                          |                               |                           | <br>                          | <br>                    |
|                 |                          | plant material<br> Silt loam, very fine sandy loam<br> Loam, gravelly sandy loam,<br>  sandy loam, stratified silt<br>  loam to fine sand, gravelly<br>  fine sandy loam, very   | <br>  0<br>  0<br> <br> | <br>  0<br>  0-15<br> <br>      | <br>  100<br> 65-100<br> <br> | <br>  100<br> 55-100<br> <br> | <br> 80-95<br> 40-80<br> <br> | <br> 55-80<br> 20-55<br>      | <br> 25-55<br> 50-75<br>  | <br> 40-65<br> 20-45<br> <br> | 1 -                     |
|                 | <br> 51-60<br> <br>      | fine sandy loam                                                                                                                                                                  | <br>  0<br> <br>        | <br>  0-15<br> <br> <br>        | <br> 40-65<br> <br> <br>      | <br> 25-60<br> <br> <br>      | <br> 15-40<br> <br> <br>      | <br>  2-20<br> <br>           | <br> 75-100<br> <br>      | <br>  0-25<br> <br> <br>      | <br>  0-3<br> <br>      |

Table 9. Engineering Sieve Data—Continued

| Map symbol    | <br>  Depth         | USDA texture                                                                                                                         | Fragn<br>                 | nents              |                           | entage pa<br>e number |                          |                     | <br>  Sand               | <br>  Silt               | <br>  Clay              |
|---------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------|---------------------------|-----------------------|--------------------------|---------------------|--------------------------|--------------------------|-------------------------|
| and soil name | į į                 |                                                                                                                                      | >10                       | 3-10               | İ                         |                       |                          |                     | _i                       | İ                        | į į                     |
|               | į                   |                                                                                                                                      | inches                    | inches             | 4                         | 10                    | 40                       | 200                 | į                        | į                        | į                       |
|               | <br>  In.           |                                                                                                                                      | Pct.                      | Pct.               | <br>                      |                       |                          | <u> </u>            | Pct.                     | Pct.                     | Pct.                    |
| 711:          |                     |                                                                                                                                      | !<br>                     | <br>               | <br>                      | 1                     | <br>                     |                     |                          |                          | !<br>                   |
| Whitsol       | 0-3<br>             | Slightly decomposed                                                                                                                  | j<br>I                    | j<br>I             | j<br>I                    | j<br>I                | <br>                     | j                   | j                        | j                        | <br>                    |
|               | 3-29                | Silt loam, very fine sandy loam                                                                                                      | i o                       | İΟ                 | i 100                     | 100                   | 80-95                    | 55-80               | 25-55                    | 40-65                    | 5-10                    |
|               |                     | Sandy loam, stratified silt<br>loam to fine sand, gravelly<br>fine sandy loam, gravelly<br>sandy loam, loam, very<br>fine sandy loam | 0<br> <br> <br> <br> <br> | 0-15<br> <br> <br> | 65-100<br> <br> <br> <br> | 55-100<br> <br> <br>  | 40-80<br> <br> <br> <br> | 20-55<br> <br> <br> | 50-75<br> <br> <br> <br> | 20-45<br> <br> <br> <br> | 0-10<br> <br> <br> <br> |
|               | 51-60<br> <br> <br> | Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand                                          | 0<br> <br> <br>           | 0-15<br> <br> <br> | 40-65<br> <br> <br>       | 25-60<br> <br> <br>   | 15-40<br> <br> <br>      | 2-20<br> <br> <br>  | 75-100<br> <br> <br>     | 0-25<br> <br> <br>       | 0-3<br> <br> <br>       |
| Doroshin      | 0-36                | ı<br> Mucky peat                                                                                                                     | <br>                      | <br>               | <br>                      |                       |                          |                     |                          |                          | <br>                    |
|               | 36-60               | Silt loam, very fine sandy loam                                                                                                      | 0<br>                     | 0<br>              | 100<br>                   | 90-100                | 85-90<br>                | 70-85               | 25-55                    | 35-75                    | 0-5<br>                 |

Table 10. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

| Map symbol                  | Depth           | Moist                   | <br>  Permeability | •                       |                      | <br>  Organic        | Eros                 | ion fa               | ctors   | Wind<br>  erodi-      | Wind<br>  erodi   |
|-----------------------------|-----------------|-------------------------|--------------------|-------------------------|----------------------|----------------------|----------------------|----------------------|---------|-----------------------|-------------------|
| and soil name               |                 | bulk<br> density        | <br> <br>          | water capacity          | extensi-<br>bility   | matter<br>           | <br>  Kw             | <br>  Kf             | <br>  T | bility<br>  group<br> | bility<br>  index |
|                             | ln.             | g/cc                    | In/Hr              | In/In                   | Pct.                 | Pct.                 | <br>                 | <br>                 | <br>    | <br>                  |                   |
| 501:                        |                 | <br>                    | <br>               | <br>                    | <br>                 | <br>                 | <br>                 | <br>                 | <br>    | <br>                  | <br>              |
| Aquic Cryofluvents          |                 | 0.05-0.10               | •                  | 0.05-0.35               |                      | 85-95                | ļ                    |                      | 1       | 1                     | 160               |
|                             | 2-6             | 0.80-0.90               | •                  | 0.25-0.27               | 0.0-2.9              | 2.0-5.0              | .37                  | .37                  |         | <br>                  |                   |
|                             | 6-31<br>  31-48 | 1.00-1.20               |                    | 0.20-0.24<br>0.13-0.22  | 0.0-2.9<br>  0.0-2.9 | 0.3-2.2              | .49<br>  .49         | .49<br> .49          | l<br>I  | l<br>I                | <br>              |
|                             |                 | 1.50-1.60               |                    | 0.04-0.06               | 0.0-2.9              | 0.0-0.5              | !                    | 1.10                 |         | <br>                  |                   |
| 02:                         | <br>            | <br>                    | <br>               | <br>                    | <br>                 | <br>                 | <br>                 | <br>                 |         | <br>                  | <br>              |
| Aquic Cryofluvents, shallow | 0-2             | 0.05-0.10               |                    | 0.05-0.35               | i                    | 85-95                | ļ                    |                      | 1       | 1                     | 160               |
|                             | 2-6             | 0.80-0.90               | •                  |                         | 0.0-2.9              | 2.0-5.0              | .37                  | .37                  | ļ       |                       | ļ                 |
|                             | 6-19<br>  19-60 | 1.00-1.20<br> 1.50-1.60 | 2-6<br>6-100       | 0.13-0.22<br>0.04-0.06  | 0.0-2.9              | 0.0-2.0              | .49<br> .10          | .49<br> .10          | <br>    | <br>                  | <br>              |
| :00.                        | į               |                         | į                  | į                       | į                    | į                    | į                    | į                    | į       | İ                     | į                 |
| 503:<br>Badland, sea cliffs | <br>-           |                         | <br>               | <br>                    |                      |                      | <br>                 | <br>                 | <br> -  | <br>                  | <br>              |
| 504:                        |                 |                         |                    |                         |                      |                      |                      |                      |         | <br>                  |                   |
| Badland, sea cliffs         | <br>-           |                         | <br>               | <br>                    |                      |                      |                      |                      | -       | <br>                  |                   |
| Typic Cryorthents           | <br>-  0-1      | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95          | <br>                 | <br>                 | <br>  5 | <br>  3               | <br>  86          |
| Typic Cryottilents          |                 | 1.25-1.70               | •                  |                         | 0.0-5.9              | 0.1-0.5              | .37                  | .49                  | 3       | 3<br>                 | 00                |
|                             |                 | 1.35-1.80               | •                  | 0.12-0.27               | 0.0-5.0              | 0.0-0.2              | .32                  |                      | į       |                       | į                 |
| 605:                        |                 | <br>                    | <br>               | <br>                    | <br>                 | <br>                 | <br>                 | <br>                 |         | <br>                  | <br>              |
| Beaches                     | ·               | ļ                       | j                  | į                       | į                    | ļ                    | ļ                    | ļ                    | ļ -     |                       | ļ                 |
| 06:                         |                 |                         | <u> </u>           | <br>                    | <u> </u>             | <br>                 | <br>                 | <br>                 |         |                       | <br>              |
| Beluga                      | •               | 0.07-0.18               |                    | 0.35-0.50               |                      | 75-90                | j                    |                      | 2       | 8                     | 0                 |
|                             | 5-7<br>  7-32   | 1.10-1.20<br> 1.10-1.50 | •                  | 0.21-0.24<br>0.15-0.22  |                      | 4.0-10<br>  0.2-1.0  | .20<br>  .64         | .20<br>  .64         |         | <br>                  |                   |
|                             |                 | 1.20-1.60               | •                  | 0.19-0.22               | •                    | 0.2-2.0              | •                    | .43                  |         | <br>                  |                   |
| 507:                        | <br>            |                         | <br>               | <br>                    | <br>                 |                      | <br>                 | <br>                 |         | <br>                  | <br>              |
| Beluga                      |                 | 0.07-0.18               |                    | 0.35-0.50               | i                    | 75-90                | i                    |                      | 2       | 8                     | 0                 |
|                             | 5-7             | 1.10-1.20               |                    | 0.21-0.24               | 0.0-2.9              | 4.0-10               | .20                  | .20                  | ļ       |                       | ļ                 |
|                             | 7-32<br>  32-60 | 1.10-1.50<br> 1.20-1.60 | •                  | 0.15-0.22<br> 0.19-0.22 | •                    | 0.2-1.0<br>  0.2-2.0 | .64<br>  .43         | .64<br> .43          | <br>    | <br>                  | <br>              |
| 08:                         | İ               | İ                       | į                  | į                       | İ                    | į                    | İ                    | İ                    | İ       | İ                     | İ                 |
| ьоо.<br>Beluga              | 0-5             | 0.07-0.18               |                    | <br> 0.35-0.50          |                      | <br>  75-90          |                      |                      | 2       | <br>  8               | 0                 |
|                             |                 | 1.10-1.20               |                    | 0.21-0.24               |                      |                      |                      |                      | į       | ĺ                     | į                 |
|                             |                 | 1.10-1.50<br> 1.20-1.60 | •                  | 0.15-0.22<br> 0.19-0.22 |                      | 0.2-1.0              | .64<br> .43          | .64<br> .43          |         | <br>                  | <br>              |
| 200.                        |                 |                         |                    |                         |                      |                      |                      |                      | į       | İ                     |                   |
| 09:<br>3eluga               | <br>-  0-5      | <br> 0.07-0.18          | <br>  0.6-2        | <br> 0.35-0.50          | <br>                 | <br>  75-90          | <br>                 | <br>                 | <br> 2  | <br>  8               | <br>  0           |
| <u>.</u>                    | 5-7             | 1.10-1.20               | •                  | 0.21-0.24               | 0.0-2.9              | 4.0-10               | .20                  | .20                  | j       | j                     | j                 |
|                             | 7-32            | 1.10-1.50<br>1.20-1.60  | •                  | 0.15-0.22<br>0.19-0.22  | 0.0-5.9              | 0.2-1.0              | •                    | .64<br> .43          |         | <br>                  |                   |
|                             | j               | j                       | İ                  | j                       | 2.0 0.9              | j                    | . <del>1</del> 0<br> | . <del>1</del> 0<br> |         |                       |                   |
| Mutnala                     | 0-4             | 0.07-0.18               |                    | 0.35-0.50               | j                    | 75-90                |                      |                      | 2       | 2                     | 134               |
|                             | 4-7<br>  7-23   | 0.60-0.70<br>0.60-0.70  | •                  | 0.30-0.35<br> 0.30-0.35 | 0.0-2.9              | 5.0-20<br>  2.0-8.0  | .37<br>  43          | .37<br>  .43         | <br>    | <br>                  | <br>              |
|                             |                 |                         | •                  | •                       | 0.0-2.9              | !                    | !                    | !                    |         |                       |                   |
|                             |                 | 1.20-1.30               | •                  | 0.15-0.18<br>           |                      | 0.0-0.1              | !                    | .43<br>              | <br>    |                       | <br>              |

Table 10. Physical Properties of the Soils—Continued

| Map symbol    | <br>  Depth                             | <br>  Moist                                              | <br>  Permeability                             | <br>  Available                                          | <br>  Linear                                     | <br>  Organic                                     | Eros<br>                         | sion fa                              | ctors           | Wind<br>  erodi-      | Wind<br>  erodi         |
|---------------|-----------------------------------------|----------------------------------------------------------|------------------------------------------------|----------------------------------------------------------|--------------------------------------------------|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------|-----------------------|-------------------------|
| and soil name |                                         | bulk density                                             |                                                | water capacity                                           | extensi-<br>bility                               | matter                                            | <br>  Kw                         | <br>  Kf                             | <br>  T         | bility<br>  group     | bility<br>  index       |
|               | In.                                     | g/cc                                                     | I                                              | In/In                                                    | Pct.                                             | Pct.                                              | <br>                             |                                      | <br>            | <br> <br>             |                         |
| 10:           |                                         |                                                          | <br>                                           | <br>                                                     | <br>                                             | <br>                                              | <br>                             | <br>                                 | <br>            | <br>                  | <br>                    |
| 3eluga        | 0-5<br>  5-7<br>  7-32<br>  32-60       | 0.07-0.18<br> 1.10-1.20<br> 1.10-1.50<br> 1.20-1.60      | 0.2-2                                          | 0.35-0.50<br> 0.21-0.24<br> 0.15-0.22<br> 0.19-0.22      | 0.0-5.9                                          | 75-90<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0       | <br>  .20<br>  .64<br>  .43      | <br>  .20<br>  .64<br>  .43          | 2<br> <br> <br> | 8<br> <br> <br>       | 0<br> <br> <br>         |
| Smokey Bay    | 0-2<br>  2-9<br>  9-55<br>  55-60       | 0.20-0.30<br> 1.10-1.20<br> 1.20-1.40<br> 1.20-1.50      | 0.7-2<br>0.7-2                                 | 0.40-0.55<br> 0.21-0.24<br> 0.22-0.25<br> 0.18-0.22      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9          | 60-85<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0       | <br>  .28<br>  .28<br>  .28      | <br>  .37<br>  .37<br>  .37          | 5<br> <br> <br> | <br>  2<br> <br> <br> | 134<br> <br> <br> <br>  |
| 11:           |                                         |                                                          |                                                |                                                          |                                                  |                                                   | <u> </u>                         |                                      |                 | <br>                  |                         |
| 3eluga        | 0-5<br>  5-7<br>  7-32<br>  32-60       | 0.07-0.18<br> 1.10-1.20<br> 1.10-1.50<br> 1.20-1.60      | 0.6-2                                          | 0.35-0.50<br> 0.21-0.24<br> 0.15-0.22<br> 0.19-0.22      | 0.0-5.9                                          | 75-90<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0       | <br>  .20<br>  .64<br>  .43      | <br>  .20<br>  .64<br>  .43          | 2<br> <br> <br> | 8<br> <br> <br>       | 0<br> <br> <br>         |
| Smokey Bay    | <br>  0-2<br>  2-9<br>  9-55<br>  55-60 | <br> 0.20-0.30<br> 1.10-1.20<br> 1.20-1.40<br> 1.20-1.50 | 1                                              | <br> 0.40-0.55<br> 0.21-0.24<br> 0.22-0.25<br> 0.18-0.22 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9     | <br>  60-85<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0 | <br> <br> .28<br> .28<br> .28    | <br> <br> .37<br> .37<br> .37        | <br> 5<br> <br> | <br>  2<br> <br>      | <br>  134<br> <br> <br> |
| 12:           |                                         |                                                          | <br>                                           | <br>                                                     | <br>                                             | <br>                                              | <br>                             | <br>                                 | <br>            | <br>                  | <br>                    |
| 3enka         | 0-3<br>  3-5<br>  5-30<br>  30-60       | 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45      | 6-20<br>  0.6-2<br>  0.6-2<br>  2-14           | 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9          | 85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0      | .37                              | <br>  .20<br>  .37<br>  .10          | 2<br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br>       |
| 13:           |                                         |                                                          | <br>                                           | <br>                                                     | <br>                                             | <br>                                              | <br>                             | <br>                                 | <br>            | <br>                  | <br>                    |
| 3enka         | 0-3<br>  3-5<br>  5-30<br>  30-60       | 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45      | 0.6-2                                          | 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9          | 85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0      | <br>  .20<br>  .37<br>  .10      | <br>  .20<br>  .37<br>  .10          | 2<br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br>       |
| 14:           |                                         |                                                          |                                                |                                                          | <u> </u>                                         |                                                   | <br>                             |                                      |                 |                       |                         |
| 3enka         | 0-3<br>  3-5<br>  5-30<br>  30-60       | 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45      | 1                                              | 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9          | 85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0      | <br>  .20<br>  .37<br>  .10      | <br>  .20<br>  .37<br>  .10          | 2<br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br>       |
| 15:<br>20-1-  |                                         |                                                          |                                                |                                                          |                                                  |                                                   | <br>                             |                                      |                 | <br> <br>             | <br> <br>  104          |
| 3enka         | 0-3<br>  3-5<br>  5-30<br>  30-60       | 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45      | 6-20<br>  0.6-2<br>  0.6-2<br>  2-14           | 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9          | 85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0      | <br>  .20<br>  .37<br>  .10      | <br>  .20<br>  .37<br>  .10          | 2<br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br>       |
| 16:<br>3enka  | <br> <br>  0-3<br>  3-5<br>  5-30       | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90               | 0.6-2                                          | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32               |                                                  | <br> <br>  85-95<br>  3.0-7.0<br>  4.0-9.0        | <br> <br> .20<br> .37            | <br> <br> .20<br> .37                | <br> <br> 2<br> | <br> <br>  2<br>      | <br> <br>  134<br>      |
|               | 30-60                                   | 1.30-1.45<br> <br> <br> <br> 0.05-0.10                   | 2-14<br> <br> <br>  6-20<br>  0.6-2<br>  0.6-2 | 0.04-0.08<br> <br> <br> <br> 0.05-0.35                   | 0.0-2.9<br> <br> <br> <br>  0.0-2.9<br>  0.0-2.9 | 0.2-2.0<br> <br> <br> <br>  85-95                 | .10<br> <br> <br> <br> <br>  .20 | .10<br> <br> <br> <br>  .20<br>  .37 |                 | <br> <br> <br> 2<br>  |                         |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                               | <br>  Depth                             | <br>  Moist                                              | <br>  Permeability              | •                                                        |                                              | <br>  Organic                                      | Eros                          | sion fa                       | ctors                      | Wind<br>  erodi-           | Wind<br>  erodi              |
|------------------------------------------|-----------------------------------------|----------------------------------------------------------|---------------------------------|----------------------------------------------------------|----------------------------------------------|----------------------------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|------------------------------|
| and soil name                            | <br> <br>                               | bulk<br>  density<br>                                    | <br> <br>                       | water capacity                                           | extensi-<br>bility                           | matter<br>                                         | <br>  Kw                      | <br>  Kf                      | <br>  T                    | bility<br>  group<br>      | bility<br>  index            |
|                                          | ln.                                     | <br>  g/cc                                               | <br>  In/Hr                     | l<br>  In/In                                             | Pct.                                         | Pct.                                               | <u> </u>                      |                               |                            | <br>                       |                              |
| 517:<br>Benka, strongly sloping          | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45 | 0.6-2<br>0.6-2                  | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0 |                               | <br> <br> .20<br> .37<br> .10 | <br> <br> 2<br> <br>       | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| Benka, gently sloping                    | 3-5<br>5-30                             | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.30-1.45 | 0.6-2<br>0.6-2                  | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.04-0.08 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  3.0-7.0<br>  4.0-9.0<br>  0.2-2.0 | <br> <br> .20<br> .37<br> .10 | <br> <br> .20<br> .37<br> .10 | <br> 2<br> <br> <br>       | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br> <br> |
| 518:<br>Boxcar                           | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> 0.05-0.10<br> 0.70-1.10<br> 0.70-1.10<br> 1.30-1.60 | 2-6<br>  2-6                    | <br> 0.05-0.35<br> 0.30-0.35<br> 0.30-0.35<br> 0.03-0.05 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  6.0-10<br>  3.0-5.0<br>  0.0-0.1  | .37                           | <br> <br> .15<br> .37<br> .24 | <br>  1<br>  1<br> <br>    | <br>  2<br> <br>           | <br>  134<br> <br> <br>      |
| 519:<br>Boxcar                           | 3-5<br>5-20                             | <br> 0.05-0.10<br> 0.70-1.10<br> 0.70-1.10<br> 1.30-1.60 | 2-6<br>  2-6                    | <br> 0.05-0.35<br> 0.30-0.35<br> 0.30-0.35<br> 0.03-0.05 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  6.0-10<br>  3.0-5.0<br>  0.0-0.1  | .37                           | <br> <br> .15<br> .37<br> .24 | <br> <br>  1<br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br>      |
| 520:<br>Boxcar                           | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> 0.05-0.10<br> 0.70-1.10<br> 0.70-1.10<br> 1.30-1.60 | 2-6<br>  2-6                    | <br> 0.05-0.35<br> 0.30-0.35<br> 0.30-0.35<br> 0.03-0.05 | 0.0-2.9                                      | <br>  85-95<br>  6.0-10<br>  3.0-5.0<br>  0.0-0.1  | .15<br>.37                    | <br> <br> .15<br> .37<br> .24 | <br> <br>  1<br> <br> <br> | <br>  2<br> <br>           | <br>  134<br> <br> <br>      |
| 521:<br>Boxcar, cool                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> 0.05-0.10<br> 0.70-1.10<br> 0.70-1.10<br> 1.30-1.60 | 2-6<br>  2-6                    | <br> 0.05-0.35<br> 0.30-0.35<br> 0.30-0.35<br> 0.03-0.05 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  6.0-10<br>  3.0-5.0<br>  0.0-0.1  | .37                           | <br> <br> .15<br> .37<br> .24 | <br> <br>  1<br> <br> <br> | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br> <br> |
| 522:<br>Boxcar, cool                     | 3-5<br>5-20                             | <br> 0.05-0.10<br> 0.70-1.10<br> 0.70-1.10<br> 1.30-1.60 | 2-6<br>  2-6                    | <br> 0.05-0.35<br> 0.30-0.35<br> 0.30-0.35<br> 0.03-0.05 | •                                            | <br>  85-95<br>  6.0-10<br>  3.0-5.0<br>  0.0-0.1  | .15<br>.37                    | <br> <br> .15<br> .37<br> .24 | <br> <br>  1<br> <br> <br> | <br> <br>  2<br> <br> <br> | <br>  134<br> <br> <br>      |
| 523:<br>Chenega                          | <br>  0-4<br>  4-7<br>  7-60            | 0.10-0.30<br> 0.60-0.90<br> 1.30-1.60                    | <br>  6-20<br>  0.6-6<br>  6-20 | <br> 0.20-0.30<br> 0.25-0.30<br> 0.03-0.05               | <br> <br>  0.0-2.9<br>  0.0-2.9              | <br>  35-90<br>  6.0-10<br>  0.0-0.1               | <br> <br> .43<br> .05         | <br> <br> .43<br> .24         | <br>  1<br> <br>           | <br>  5<br>                | <br>  56<br> <br>            |
| 524:<br>Chenega, cool                    | <br>  0-4<br>  4-7<br>  7-60            | <br> 0.10-0.30<br> 0.60-0.90<br> 1.30-1.60               | 0.6-6                           | <br> 0.20-0.30<br> 0.25-0.30<br> 0.03-0.05               | <br> <br>  0.0-2.9<br>  0.0-2.9              | <br>  35-90<br>  6.0-10<br>  0.0-0.1               | •                             | <br> <br> .43<br> .24         | <br> <br>  1<br>           | <br> <br>  5<br>           | <br> <br>  56<br>            |
| 525:<br>Chenega, occasionally<br>flooded | <br>  0-4<br>  4-7<br>  7-60            | <br> 0.10-0.30<br> 0.60-0.90<br> 1.30-1.60               | 0.6-6                           | <br> 0.20-0.30<br> 0.25-0.30<br> 0.03-0.05               | <br> <br> <br> 0.0-2.9<br> 0.0-2.9           | <br>  35-90<br>  6.0-10<br>  0.0-0.1               | <br> <br> .43<br> .05         | <br> <br> .43<br> .24         | <br> <br> 1<br> <br>       | <br> <br>  5<br> <br>      | <br> <br>  56<br> <br>       |
| 526:<br>Chulitna                         | <br>  0-2<br>  2-33<br>  33-60          | <br> 0.05-0.10<br> 0.70-1.10<br> 1.30-1.60               | 2-6                             | <br> 0.05-0.35<br> 0.30-0.35<br> 0.03-0.05               | <br> <br> 0.0-2.9<br> 0.0-2.9                | <br>  85-95<br>  5.0-20<br>  0.2-2.0               | •                             | <br> <br> .43<br> .24         | <br> <br> 2<br> <br>       | <br> <br>  2<br>           | <br> <br>  134<br> <br>      |

Table 10. Physical Properties of the Soils—Continued

| Map symbol       | <br>  Depth | <br>  Moist                                | <br>  Permeability            |                                            |                          | <br>  Organic                        | Eros                  | sion fa               | ctors           | Wind<br>  erodi-      | Wind<br>  erodi    |
|------------------|-------------|--------------------------------------------|-------------------------------|--------------------------------------------|--------------------------|--------------------------------------|-----------------------|-----------------------|-----------------|-----------------------|--------------------|
| and soil name    |             | bulk<br>  density<br>                      | <br> <br>                     | water capacity                             | extensi-<br>bility       | matter<br> <br>                      | <br>  Kw<br>          | <br>  Kf<br>          | <br>  T<br>     | bility<br>  group<br> | bility<br>  index  |
|                  | In.         | <br>  g/cc                                 | <br>  In/Hr                   | <br>  In/In                                | Pct.                     | Pct.                                 | <br>                  |                       |                 | <br>                  |                    |
| 527:             |             |                                            | !                             |                                            |                          |                                      |                       |                       |                 | ļ                     |                    |
| Chulitna         | 2-33        | <br> 0.05-0.10<br> 0.70-1.10<br> 1.30-1.60 | <br>  6-20<br>  2-6<br>  6-20 | <br> 0.05-0.35<br> 0.30-0.35<br> 0.03-0.05 | 0.0-2.9                  | <br>  85-95<br>  5.0-20<br>  0.2-2.0 | <br> <br> .43<br> .05 | <br> <br> .43<br> .24 | <br> 2<br> <br> | <br>  2<br>           | <br>  134<br> <br> |
| -00              | į           | į                                          | į                             | į                                          | į                        | į                                    | į                     | į                     | į               | į                     | į                  |
| 528:<br>Chulitna | <br>  0-2   | <br> 0.05-0.10                             | <br>  6-20                    | <br> 0.05-0.35                             | <br>                     | <br>  85-95                          | <br>                  | <br>                  | <br> 2          | <br>  2               | <br>  134          |
| Orialitia        | 2-33        | 0.70-1.10                                  | 2-6                           | 0.30-0.35                                  | 1                        | 5.0-20                               | <br> .43              | .43                   | -               | <del>-</del>          | 104                |
|                  |             | 1.30-1.60                                  |                               | 0.03-0.05                                  |                          | 0.2-2.0                              | .05                   | .24                   | İ               | j                     | İ                  |
| 529:             |             |                                            | !                             |                                            |                          |                                      |                       |                       |                 |                       |                    |
| 529:<br>Chulitna | <br>  0-2   | 0.05-0.10                                  | <br>  6-20                    | <br> 0.05-0.35                             | <br>                     | <br>  85-95                          | <br>                  |                       | <br> 2          | l<br>l 2              | <br>  134          |
| Orialitia        |             | 0.70-1.10                                  |                               | 0.30-0.35                                  |                          | 5.0-20                               | <br> .43              | .43                   | -               | <del>-</del>          | 10-                |
|                  |             | 1.30-1.60                                  |                               | 0.03-0.05                                  |                          | 0.2-2.0                              | .05                   | .24                   | İ               | j                     | İ                  |
| .00.             |             |                                            |                               | ļ                                          |                          | ļ                                    |                       |                       |                 |                       |                    |
| i30:<br>Chunilna | <br>  0-4   | <br> 0.07-0.18                             | <br>  0.7-2                   | <br> 0.35-0.50                             | <br>                     | <br>  75-90                          | <br>                  | <br>                  | <br> 1          | <br>  8               | <br>  0            |
| <del></del>      |             | 0.75-0.10                                  |                               | 0.34-0.36                                  |                          | 10-20                                | .37                   | .37                   | l               | Ĭ                     |                    |
|                  |             | 0.90-1.20                                  | 2-6                           | 0.32-0.34                                  |                          | 8.0-15                               |                       | .43                   | i               | i                     | i                  |
|                  |             | 1.50-1.80                                  |                               | 0.06-0.08                                  |                          | 0.0-0.5                              |                       | .49                   | ļ               | į                     | į                  |
| 531:             |             |                                            |                               |                                            |                          |                                      |                       |                       |                 |                       |                    |
| Chunilna         | 0-4         | 0.07-0.18                                  | l<br>l 0.7-2                  | <br> 0.35-0.50                             | <br>                     | l<br>l 75-90                         | <br>                  |                       | 1               | l<br>I 8              | 0                  |
|                  |             | 0.75-0.90                                  |                               | 0.34-0.36                                  |                          | 10-20                                | .37                   | .37                   | i .             | i                     | -                  |
|                  | 8-18        | 0.90-1.20                                  | 2-6                           | 0.32-0.34                                  | 0.0-2.9                  | 8.0-15                               | .43                   | .43                   | İ               | j                     | j                  |
|                  | 18-60       | 1.50-1.80                                  | 0.2-2                         | 0.06-0.08                                  | 0.0-2.9                  | 0.0-0.5                              | 1.10                  | .49                   |                 |                       |                    |
| 532:             |             | <br>                                       | <br>                          | <br>                                       | <br>                     | <br>                                 | <br>                  |                       | <br>            | l<br>I                | <br>               |
| Chunilna, cool   | 0-4         | 0.07-0.18                                  | 0.7-2                         | 0.35-0.50                                  | i                        | 75-90                                | <br>                  |                       | 1               | 8                     | 0                  |
|                  | 4-8         | 0.75-0.90                                  |                               | 0.34-0.36                                  |                          | 10-20                                | .37                   | .37                   | İ               | İ                     | j                  |
|                  |             | 0.90-1.20                                  | •                             | 0.32-0.34                                  |                          | 8.0-15                               | .43                   | .43                   | ļ               | !                     | ļ                  |
|                  | 18-60       | 1.50-1.80                                  | 0.2-2                         | 0.06-0.08                                  | 0.0-2.9                  | 0.0-0.5                              | .10                   | .49                   |                 | <br>                  |                    |
| 533:             |             |                                            | i                             | <br>                                       | <u> </u>                 | <br>                                 | <br>                  | ľ                     |                 | <u> </u>              | İ                  |
| Chunilna, cool   |             | 0.07-0.18                                  |                               | 0.35-0.50                                  |                          | 75-90                                | j                     | j                     | į 1             | j 8                   | j 0                |
|                  | 4-8         | 0.75-0.90                                  | 1                             | 0.34-0.36                                  |                          | 10-20                                | .37                   | .37                   | ļ               | ļ                     | ļ                  |
|                  |             | 0.90-1.20                                  |                               | 0.32-0.34                                  |                          | 8.0-15                               | .43                   | .43                   | !               |                       |                    |
|                  | 18-60<br>   | 1.50-1.80                                  | 0.2-2                         | 0.06-0.08                                  | 0.0-2.9<br>              | 0.0-0.5<br>                          | .10<br>               | .49<br>               | <br>            | <br>                  | <br>               |
| 534:             |             |                                            | İ                             | j                                          | j                        | i                                    | Ϊ                     |                       |                 | İ                     |                    |
| Clam Gulch       |             | 0.05-0.10                                  |                               | 0.05-0.35                                  |                          | 85-95                                |                       |                       | 1               | 8                     | 0                  |
|                  |             | 0.65-1.00<br> 1.20-1.90                    | 2-6<br>  0.06-0.2             | 0.32-0.34<br>0.25-0.28                     | •                        | 2.0-10<br>  0.2-2.0                  |                       | .37<br>  .32          |                 |                       |                    |
|                  | 13-00       | 1.20-1.90                                  | 0.00-0.2                      | 0.25 <b>-</b> 0.26<br>                     | 0.0-3.9<br>              | 0.2 <b>-</b> 2.0<br>                 | .32<br>               | .32<br>               | <br>            | l<br>I                | <br>               |
| 535:             | İ           | İ                                          | į                             | į                                          | į                        | į                                    | į                     | į                     | į               | į                     | į                  |
| Clunie           |             | 0.05-0.10                                  |                               | 0.19-0.21                                  |                          | 80-90                                |                       |                       | 2               | 8                     | 0                  |
|                  | 33-60       | 1.50-1.80                                  | 0.003-0.06                    | 0.20-0.30                                  | 3.0-5.9<br>              | 0.2 <b>-</b> 2.0                     | .24<br>               | .24<br>               |                 | <br>                  | <br>               |
| 536:             |             |                                            | <u> </u>                      | <u> </u>                                   | İ                        | <u> </u>                             | İ                     | i                     |                 |                       | İ                  |
| Coal Creek       | •           | 0.05-0.10                                  | 6-20                          | 0.05-0.35                                  | i                        | 85-95                                | j                     | j                     | 2               | 8                     | 0                  |
|                  |             | 1.10-1.20                                  |                               | 0.20-0.25                                  |                          | 2.0-10                               | .37                   | .37                   | ļ               | !                     | ļ                  |
|                  |             | 1.20-1.80<br> 1.20-1.70                    | 0.2-0.6<br>0.2-0.6            | 0.32-0.35<br> 0.20-0.30                    |                          | 0.3-2.2                              | .43<br>  .24          | .49<br>  49           |                 | <br>                  |                    |
|                  | 23-00<br>   | 1.20-1.70                                  | U.Z-U.O<br>                   | U.2U <del>-</del> U.3U<br>                 | 0.0 <del>-</del> 2.9<br> | U.Z <del>-</del> Z.U<br>             | .24<br>               | .49<br>               |                 | !<br>                 |                    |
| 37:              | İ           | İ                                          | j                             | j                                          | j                        | j                                    | İ                     | İ                     | İ               | İ                     | İ                  |
| Coal Creek       |             | 0.05-0.10                                  | 6-20                          | 0.05-0.35                                  |                          | 85-95                                |                       |                       | 2               | 8                     | 0                  |
|                  |             | 1.10-1.20                                  | 0.6-2                         | 0.20-0.25                                  | •                        | 2.0-10                               | .37                   | .37                   |                 | l                     |                    |
|                  |             | 1.20-1.80<br> 1.20-1.70                    | 0.2-0.6<br>0.2-0.6            | 0.32-0.35<br>0.20-0.30                     | •                        | 0.3-2.2                              | .43<br>  .24          | .49<br>  .49          | <br>            | !<br>!                |                    |
|                  | 20.00       | 120 1.70                                   | 0.2 0.0                       |                                            | 1 3.0 2.0                | J.2 2.0                              | . <u>~</u> ~          | <b>T</b> U            | 1               | l                     | 1                  |

Table 10. Physical Properties of the Soils—Continued

| Map symbol    | <br>  Depth     | <br>  Moist                                         | <br>  Permeability | <br>  Available                                     | <br>  Linear                            | <br>  Organic                               | Eros                        | sion fa                     | ctors                | Wind<br>  erodi-  | Wind<br>  erodi-  |
|---------------|-----------------|-----------------------------------------------------|--------------------|-----------------------------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------|-----------------------------|----------------------|-------------------|-------------------|
| and soil name |                 | bulk<br>  density<br>                               | <br> <br>          | water capacity                                      | extensi-<br>bility                      | matter<br> <br>                             | <br>  Kw                    | <br>  Kf                    | <br>  T<br>          | bility<br>  group | bility<br>  index |
|               |                 | g/cc                                                | In/Hr              | In/In                                               | Pct.                                    | Pct.                                        | ļ                           |                             | <br>                 | !<br>!            | ļ                 |
| 538:          |                 | <br>                                                | <br>               | <br>                                                | <br>                                    | <br>                                        | <br>                        | l<br>I                      | <br>                 | <br>              | <br>              |
| Coal Creek    | 6-15<br>  15-23 | 0.05-0.10<br> 1.10-1.20<br> 1.20-1.80<br> 1.20-1.70 | 0.6-2<br>0.2-0.6   | 0.05-0.35<br> 0.20-0.25<br> 0.32-0.35<br> 0.20-0.30 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 85-95<br>2.0-10<br>0.3-2.2<br>0.2-2.0       | <br>  .37<br>  .43<br>  .24 | <br>  .37<br>  .49<br>  .49 | 2<br> <br> <br>      | <br>  8<br> <br>  | 0<br> <br>        |
| -00           | į               | į                                                   | į                  | į                                                   | į                                       | į                                           | į                           | į                           | į                    | į                 | į                 |
| 539:<br>Cohoe | 0-2             | <br> 0.07-0.18                                      | <br>  0.6-2        | <br> 0.35-0.50                                      | <br>                                    | <br>  75-90                                 | <br>                        | <br>                        | <br>  5              | <br>  2           | <br>  134         |
| Conico        | 2-24<br>24-52   | 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90               | 2-6<br>  0.7-2     | 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22               | 0.0-2.9                                 | 5.0-10<br>  0.1-1.0<br>  0.1-0.5            | .37<br>.43                  | .37<br>  .49<br>  .43       | <br> <br> <br>       |                   |                   |
| 540:          |                 |                                                     | İ                  | j                                                   | j                                       | i                                           | İ                           | İ                           | İ                    | İ                 | İ                 |
| Cohoe         | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  5.0-10<br>  0.1-1.0<br>  0.1-0.5 | .37<br>.43                  | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br> <br> | 2<br> <br> <br>   | 134<br> <br> <br> |
| 541:          |                 |                                                     |                    | İ                                                   | j                                       | İ                                           |                             |                             | ¦                    |                   | İ                 |
| Cohoe         | 2-24<br>24-52   | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | 0.0-2.9                                 | 75-90<br> 5.0-10<br> 0.1-1.0<br> 0.1-0.5    | .37<br>.43                  | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br>      | 2<br> <br> <br>   | 134<br> <br> <br> |
| 542:          |                 | <br>                                                | <br>               | <br>                                                | <br>                                    | <br>                                        | <br>                        | <br>                        | <br>                 | <br>              |                   |
| Cohoe         | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6                | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>5.0-10<br>0.1-1.0<br>0.1-0.5       | .37<br>.43                  | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br>      | 2<br> <br>        | 134<br> <br> <br> |
| 543:          |                 | <br>                                                | <br>               | <br>                                                | <br>                                    | <br>                                        | <br>                        | <br>                        | <br>                 | <br>              |                   |
| Cohoe         | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 |                                         | 75-90<br>5.0-10<br>0.1-1.0<br>0.1-0.5       | .37<br>.43                  | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br>      | 2<br> <br> <br>   | 134<br> <br> <br> |
| 544:          |                 | <br>                                                | <br>               | <br>                                                | <br>                                    | <br>                                        | <br>                        | <br>                        | <br>                 | <br>              |                   |
| Cohoe         | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | 0.0-2.9<br>0.0-2.9                      |                                             | .37<br>.43                  | .37<br>.49                  | 3<br> <br> <br>      | 2<br> <br> <br>   | 134<br> <br> <br> |
| 545:          |                 | <br>                                                | <u> </u>           | <br>                                                | <u> </u>                                | <br>                                        | <br>                        | <br>                        | <br>                 | <br>              |                   |
| Cohoe, dry    |                 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>5.0-10<br>0.1-1.0<br>0.1-0.5       | <br>  .37<br>  .43<br>  .24 | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br>      | 2<br> <br> <br>   | 134<br> <br> <br> |
| 546:          |                 |                                                     | <br>               | <br>                                                | <br>                                    | <br>                                        | <br>                        | <br>                        | <br>                 | <br>              | <br>              |
| Cohoe, dry    | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  5.0-10<br>  0.1-1.0<br>  0.1-0.5 | <br>  .37<br>  .43<br>  .24 | <br>  .37<br>  .49<br>  .43 | <br> <br> <br> <br>  | 2<br> <br> <br>   | 134<br> <br> <br> |
| 547:          |                 |                                                     |                    |                                                     | İ                                       | ¦                                           | <br>                        |                             | <br>                 | <br>              |                   |
| Cohoe, dry    | 2-24<br>  24-52 | 0.07-0.18<br> 0.70-1.00<br> 1.20-1.60<br> 1.50-1.90 | 2-6<br>  0.7-2     | 0.35-0.50<br> 0.32-0.35<br> 0.32-0.35<br> 0.08-0.22 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  5.0-10<br>  0.1-1.0<br>  0.1-0.5 | <br>  .37<br>  .43<br>  .24 | <br>  .37<br>  .49<br>  .43 | 3<br> <br> <br>      | 2<br> <br> <br>   | 134<br> <br> <br> |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                   | <br>  Depth     | <br>  Moist             | <br>  Permeability   | <br>  Available         | <br>  Linear         | <br>  Organic       | Eros<br>     | ion fa       | ctors   | Wind<br>  erodi-  | Wind              |
|------------------------------|-----------------|-------------------------|----------------------|-------------------------|----------------------|---------------------|--------------|--------------|---------|-------------------|-------------------|
| and soil name                | <br> <br>       | bulk<br> density        |                      | water capacity          | extensi-<br>bility   | matter<br>          | <br>  Kw     | <br>  Kf     | <br>  T | bility<br>  group | bility<br>  index |
|                              | In.             | g/cc                    | In/Hr                | <br>  In/In             | Pct.                 | Pct.                | <br>         | <br>         | <br>    | <br> <br>         |                   |
| 548:                         | <br>            | <br>                    | <br>                 | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>    | <br>              | <br>              |
| Cohoe, dry                   |                 | 0.07-0.18               | •                    | 0.35-0.50               |                      | 75-90               |              |              | 3       | 2                 | 134               |
|                              | 2-24<br>  24-52 | 0.70-1.00<br> 1.20-1.60 | •                    | 0.32-0.35<br>0.32-0.35  | 0.0-2.9              | 5.0-10<br>  0.1-1.0 | .37<br>  .43 | .37<br>  .49 | <br>    | <br>              |                   |
|                              |                 | 1.50-1.90               | •                    | 0.08-0.22               |                      | 0.1-0.5             |              | .43          |         |                   |                   |
| 549:                         | <br>            | <br>                    | <br>                 | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>    | <br>              |                   |
| Cohoe, dry                   | 0-2             | 0.07-0.18               | 0.6-2                | 0.35-0.50               | i                    | 75-90               | i            | i            | 3       | 2                 | 134               |
|                              | 2-24            | 0.70-1.00               |                      | 0.32-0.35               | 0.0-2.9              | 5.0-10              | .37          | .37          | İ       | İ                 | İ                 |
|                              |                 | 1.20-1.60               |                      | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | ļ       |                   | !                 |
|                              | 52-60<br>       | 1.50-1.90<br>           | 2-13<br>             | 0.08-0.22<br>           | 0.0 <b>-</b> 2.9<br> | 0.1-0.5<br>         | .24<br>      | .43<br>      | <br>    | <br>              | <br>              |
| 550:                         |                 | 0.07.040                |                      |                         | į                    | 75.00               | į            | į            |         |                   | 104               |
| Cohoe, dry                   | 0-2<br>  2-24   | 0.07-0.18<br>0.70-1.00  | 1                    | 0.35-0.50<br>0.32-0.35  | <br> 0.0-2.9         | 75-90<br> 5.0-10    | <br>  .37    | <br>  .37    | 3       | 2                 | 134               |
|                              |                 | 1.20-1.60               | •                    | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | !<br>!  | <br>              | i                 |
|                              |                 | 1.50-1.90               |                      | 0.08-0.22               | 0.0-2.9              | 0.1-0.5             |              | .43          |         |                   | ļ                 |
| 551:                         | <br>            | <br>                    | <br>                 | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>    | <br>              | <br>              |
| Cohoe, moderately steep      | 0-2             | 0.07-0.18               | 0.6-2                | 0.35-0.50               | i                    | 75-90               | i            | i            | 3       | 2                 | 134               |
|                              | 2-24            | 0.70-1.00               |                      | 0.32-0.35               | 0.0-2.9              | 5.0-10              | .37          | .37          | İ       | İ                 | İ                 |
|                              | 24-52           | 1.20-1.60               |                      | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | ļ       |                   | ļ                 |
|                              | 52-60<br>       | 1.50-1.90<br>           | 2-13<br>             | 0.08-0.22<br>           | 0.0-2.9<br>          | 0.1-0.5<br>         | .24<br>      | .43<br>      | <br>    | <br>              |                   |
| Cohoe, gently sloping        | 0-2             | 0.07-0.18               | 0.6-2                | 0.35-0.50               | j                    | 75-90               | j            | i            | 3       | 2                 | 134               |
|                              |                 | 0.70-1.00               | •                    | 0.32-0.35               | 0.0-2.9              | 5.0-10              | .37          | .37          | ĺ       | ĺ                 | ĺ                 |
|                              |                 | 1.20-1.60               |                      | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | ļ       |                   | ļ                 |
|                              | 52-60<br>       | 1.50-1.90<br>           | 2-13<br>             | 0.08-0.22<br>           | 0.0 <b>-</b> 2.9<br> | 0.1-0.5             | .24<br>      | .43<br>      | <br>    |                   | <br>              |
| 552:                         |                 | 0.07.040                |                      |                         | į                    | 75.00               | į            | į            |         |                   | 104               |
| Cohoe, dry, moderately steep | 0-2<br>  2-24   | 0.07-0.18               |                      | 0.35-0.50               | <br>  0.0-2.9        | 75-90<br>  5.0-10   | <br>  .37    | <br>  .37    | 3<br>   | 2                 | 134               |
| зісер                        | 24-52           | 1.20-1.60               | 1                    | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | i<br>i  | <br>              |                   |
|                              |                 | 1.50-1.90               | •                    | 0.08-0.22               | 0.0-2.9              | 0.1-0.5             | .24          | .43          | į       |                   | į                 |
| Cohoe, dry, gently sloping   | <br>-  0-2      | <br> 0.07-0.18          | <br>  0.6-2          | <br> 0.35-0.50          | <br>                 | <br>  75-90         | <br>         | <br>         | <br> 3  | <br>  2           | <br>  134         |
|                              | 2-24            | 0.70-1.00               | 2-6                  | 0.32-0.35               | 0.0-2.9              | 5.0-10              | .37          | .37          | İ       | j                 | İ                 |
|                              |                 | 1.20-1.60               |                      | 0.32-0.35               | 0.0-2.9              | 0.1-1.0             | .43          | .49          | [       |                   | ļ                 |
|                              | 52-60<br>       | 1.50-1.90<br>           | 2-13<br>             | 0.08-0.22<br>           | 0.0 <b>-</b> 2.9<br> | 0.1-0.5<br>         | .24<br>      | .43<br>      | <br>    | <br>              | <br>              |
| 553:                         |                 | 0.07.0.16               |                      |                         | į                    |                     | į            | į            |         |                   |                   |
| Cohoe, dry                   | 0-2             | 0.07-0.18               |                      | 0.35-0.50               |                      | 75-90               |              |              | 3       | 2                 | 134               |
|                              | 2-24<br>  24-52 | 0.70-1.00<br> 1.20-1.60 |                      | 0.32-0.35<br> 0.32-0.35 | 0.0-2.9<br>  0.0-2.9 | 5.0-10<br>  0.1-1.0 | .37<br>  .43 | .37<br>  .49 | <br>    | <br>              |                   |
|                              |                 | 1.50-1.90               |                      | 0.08-0.22               | 0.0-2.9              | 0.1-1.0             |              | .49          |         |                   |                   |
| Kenai                        | <br>-  0-2      | <br> 0.07-0.18          | <br>  0.7 <b>-</b> 2 | <br> 0.35-0.50          | <br>                 | <br>  75-90         | <br>         | <br>         | <br> 3  | <br>  2           | <br>  134         |
|                              | 2-6             | 0.70-0.10               | •                    | 0.33-0.35               | 0.0-2.9              | 2.0-10              | .37          | .37          |         | <i>-</i>          | 104               |
|                              |                 | 0.70-1.10               |                      | 0.33-0.35               | 0.0-2.9              | 4.0-10              | .43          | .43          | İ       | İ                 | İ                 |
|                              | 19-24           | 1.20-1.80               | 2-6                  | 0.33-0.35               | 0.0-2.9              | 0.3-1.5             | .43          | .49          | İ       | j                 | İ                 |
|                              | 25-60           | 1.50-1.80               | 0.06-0.2             | 0.25-0.27               | 3.0-5.9              | 0.2-1.0             | .43          | .49          |         |                   |                   |

Table 10. Physical Properties of the Soils—Continued

| Map symbol         | <br>  Depth | <br>  Moist                | <br>  Permeability   |                            |                          | <br>  Organic        | Eros         | ion fa               | ctors       | Wind<br>  erodi-      | Wind<br>  erodi-  |
|--------------------|-------------|----------------------------|----------------------|----------------------------|--------------------------|----------------------|--------------|----------------------|-------------|-----------------------|-------------------|
| and soil name      |             | bulk<br>  density<br>      | <br> <br>            | water<br>  capacity<br>    | extensi-<br>bility       | matter<br> <br>      | <br>  Kw<br> | <br>  Kf<br>         | <br>  T<br> | bility<br>  group<br> | bility<br>  index |
| F. 4.              |             | g/cc                       | In/Hr                | In/In                      | Pct.                     | Pct.                 |              | <br>                 | ļ           | <br> <br>             | <br>              |
| 554:<br>Cohoe, dry | 0-2         | 0 07 0 19                  | <br>  0.6-2          | <br> 0.25.0.50             | <br>                     | <br>  75.00          | <br>         |                      | <br> 3      | <br>  2               | <br>  134         |
| Conde, dry         |             | 0.07-0.18<br> 0.70-1.00    | •                    | 0.35-0.50<br>0.32-0.35     | 0.0-2.9                  | 75-90<br>  5.0-10    | <br>  .37    | <br>  .37            | 0           | <b>-</b><br>          | 134               |
|                    |             | 1.20-1.60                  | 0.7-2                | 0.32-0.35                  | 0.0-2.9                  | 0.1-1.0              | .37<br>  .43 | .37<br>  .49         |             | <br>                  |                   |
|                    |             | 1.50-1.90                  |                      | 0.08-0.22                  |                          | 0.1-1.0              | .24          | .43                  | <br>        | <br>                  | <br>              |
| Kenai              | 0-2         | <br> 0.07-0.18             | <br>  0.7 <b>-</b> 2 | <br> 0.35-0.50             | <br>                     | <br>  75-90          | <br>         | <br>                 | <br> 3      | <br>  2               | <br>  134         |
| rtona.             | 2-6         | 0.70-0.80                  |                      | 0.33-0.35                  | 1                        | 2.0-10               | .37          | .37                  | i           | , <del>-</del>        | , .o.             |
|                    |             | 0.70-1.10                  | •                    | 0.33-0.35                  |                          | 4.0-10               | .43          | .43                  | i           | i                     | i                 |
|                    |             | 1.20-1.80                  | 1                    | 0.33-0.35                  |                          | 0.3-1.5              | .43          | .49                  | i           | i                     | i                 |
|                    |             | 1.50-1.80                  | •                    | 0.25-0.27                  |                          | 0.2-1.0              | .43          | .49                  | į           |                       | <u> </u>          |
| 555:               |             | <br>                       | ]<br>]               | <br>                       | <br>                     | <br>                 | İ            | <br>                 | <br>        | <br>                  | <br>              |
| Cohoe, dry         |             | 0.07-0.18                  |                      | 0.35-0.50                  | i                        | 75-90                |              |                      | 3           | 2                     | 134               |
|                    |             | 0.70-1.00                  |                      | 0.32-0.35                  | 0.0-2.9                  | 5.0-10               | .37          | .37                  | !           | ļ                     | ļ                 |
|                    | •           | 1.20-1.60<br> 1.50-1.90    |                      | 0.32-0.35<br>0.08-0.22     | 0.0-2.9                  | 0.1-1.0<br>  0.1-0.5 | .43<br>  .24 | .49<br>  .43         |             | <br>                  | <br>              |
|                    | i           | İ                          | İ                    | j                          | j                        | j                    | İ            | İ                    |             |                       |                   |
| Nikolai            |             | 0.07-0.18<br> 0.20-0.30    | •                    | 0.35-0.50<br> 0.40-0.55    | <br>                     | 75-90<br>  60-85     | <br>         | <br>                 | 2<br>       | 8<br>                 | 0<br>             |
|                    |             | 1.20-1.60                  | •                    | 0.32-0.35                  |                          | 0.3-2.2              | l<br>  .55   | <br>  .55            | i           | i                     | i                 |
|                    | 1 -         | 1.50-1.70                  | •                    | 0.03-0.10                  |                          | 0.0-0.5              | .24          | .24                  | į           | ļ                     | į                 |
| 556:               |             | <br>                       | <br>                 | <br>                       | <br>                     | <br>                 | <br>         | <br>                 | <br>        | <br>                  | <br>              |
| Cohoe, dry         | 0-2         | 0.07-0.18                  | 0.6-2                | 0.35-0.50                  | j                        | 75-90                | j            | j                    | 3           | 2                     | 134               |
|                    | 2-24        | 0.70-1.00                  | 2-6                  | 0.32-0.35                  | 0.0-2.9                  | 5.0-10               | .37          | .37                  | ĺ           | ĺ                     | ĺ                 |
|                    |             | 1.20-1.60                  | 1                    | 0.32-0.35                  | 0.0-2.9                  | 0.1-1.0              | .43          | .49                  |             | ļ                     |                   |
|                    | i           | 1.50-1.90<br>              | İ                    | 0.08-0.22<br>              | 0.0 <del>-</del> 2.9<br> | 0.1-0.5<br>          | .24<br>      | .43<br>              | <br>        | <br>                  | <br>              |
| Nikolai            |             | 0.07-0.18<br> 0.20-0.30    | •                    | 0.35-0.50<br>0.40-0.55     | <br>                     | 75-90<br>  60-85     | <br>         | <br>                 | 2           | 8                     | 0                 |
|                    |             | 1.20-1.60                  | •                    | 0.32-0.35                  |                          | 0.3-2.2              | !            | !                    | !           | <br>                  |                   |
|                    |             | 1.50-1.70                  | •                    | 0.03-0.10                  | •                        | 0.0-0.5              | .55<br>  .24 | .55<br>  .24         |             | !<br>                 | <br>              |
| 557:               | ļ           |                            |                      |                            |                          |                      |              |                      |             |                       |                   |
| Cytex Creek        | 0-2         | 0.05-0.10                  | 6-20                 | 0.05-0.35                  | ¦                        | 85-95                | <br>         | <br>                 | 2           | 2                     | 134               |
| •                  | 2-3         | 0.50-0.90                  | 2-6                  | 0.30-0.35                  | 0.0-2.9                  | 2.0-8.0              | .43          | .43                  | İ           | j                     | İ                 |
|                    | 3-7         | 0.50-0.90                  | 2-6                  | 0.30-0.35                  | 0.0-2.9                  | 4.0-10               | .28          | .28                  | ĺ           | ĺ                     | ĺ                 |
|                    | 7-31        | 0.80-1.20                  |                      | 0.15-0.22                  |                          | 1.0-3.0              | .43          | .43                  | ĺ           | ĺ                     | Ì                 |
|                    | 31-60       | 1.50-1.60                  | 6-20                 | 0.03-0.05                  | 0.0-2.9                  | 0.0-0.1              | .05<br>I     | .24<br>              |             | <br>                  |                   |
| 558:               |             |                            |                      |                            |                          |                      |              |                      |             |                       |                   |
| Doroshin           | •           | 0.07-0.18<br> 1.30-1.40    | 0.6-2<br>0.7-2       | 0.35-0.50<br>0.18-0.22     | <br>  0 0-2 0            | 75-90<br>  0.3-2.2   | <br>  .43    | <br>  .43            | 2           | 8                     | 0                 |
|                    | 30-60       | 1.50 <del>-</del> 1.40<br> | 0.7-2                | 0.10 <del>-</del> 0.22<br> | 0.0 <del>-</del> 2.9<br> | 0.3 <u>-2.2</u><br>  | .+3<br>      | . <del>4</del> 0<br> |             | <br>                  |                   |
| 559:<br>Doroshin   | <br>  0-36  | j<br> 0.07-0.18            | j<br>  0.6-2         | <br> 0.35-0.50             | j<br>                    | <br>  75-90          | <br>         | j<br>                | <br>  2     | j<br>  8              | ј<br>I 0          |
| D01031III1         |             | 1.30-1.40                  | 0.6-2                | 0.18-0.22                  |                          | 0.3-2.2              | .43          | .43                  |             |                       |                   |
| 560:               |             | [<br>]                     | <br>                 | <br>                       | <br>                     | <br>                 | <br>         | <br>                 | <br>        | <br>                  | <br>              |
| Dystrocryepts      |             | 0.05-0.10                  |                      | 0.05-0.35                  |                          | 85-95                | <br>         |                      | 1           | 8                     | 0                 |
|                    | 2-7         | 1.20-1.30                  |                      | 0.06-0.22                  |                          | 4.0-8.0              | .10          | .24                  | ļ           | !                     | ļ                 |
|                    |             | 1.40-1.70<br> 1.50-1.60    | 6-20<br>  6-20       | 0.03-0.14                  | 0.0-2.9                  | 0.0-1.0<br>  0.0-0.1 | .10<br>  .10 | .24<br>  .10         |             | <br>                  |                   |
|                    |             |                            | İ                    | İ                          | į                        | İ                    | . 10         | į                    |             |                       |                   |
| Typic Cryorthents  |             | 0.05-0.10                  | •                    | 0.05-0.35                  |                          | 85-95                |              |                      | 5           | 3                     | 86                |
|                    |             | 1.25-1.70<br> 1.35-1.80    | 0.06-6<br>0.06-6     | 0.16-0.27<br> 0.12-0.27    |                          | 0.1-0.5<br>  0.0-0.2 | .37<br>  .32 | .49<br>  .43         |             | <br>                  | <br>              |
|                    | j           | İ                          | İ                    | j                          | į                        | j                    | į            | İ                    |             |                       | İ                 |
| lliamna, cool      |             | 0.07-0.18<br> 0.60-0.70    | •                    | 0.35-0.50<br>0.30-0.35     | <br>  0 0-2 9            | 75-90<br>  2.0-20    | <br>  .43    | <br>  .43            | 2           | 2                     | 134               |
|                    | 2-29        | 10.00 <del>-</del> 0.70    | <del>2-</del> 0      | <sub> </sub> 0.00-0.00     | J U.U-Z.S                | L.U-2U               | .+ა          | ۰+۵                  | I           | I                     | I                 |

Table 10. Physical Properties of the Soils—Continued

| Map symbol      | <br>  Depth     | <br>  Moist             | <br>  Permeability | <br>  Available         | extensi-             |                      | <br>  Organic | Eros<br>     | ion fa  | ctors             | Wind<br>  erodi-  | Wind<br>  erodi |
|-----------------|-----------------|-------------------------|--------------------|-------------------------|----------------------|----------------------|---------------|--------------|---------|-------------------|-------------------|-----------------|
| and soil name   |                 | bulk density            | <br>               | water capacity          | extensi-<br>bility   | matter<br>           | <br>  Kw      | <br>  Kf     | <br>  T | bility<br>  group | bility<br>  index |                 |
|                 | In.             | <br>  g/cc              | <br>  In/Hr        | <br>  In/In             | Pct.                 | Pct.                 | <br>          | <br>         |         | <br>              |                   |                 |
| 661:            |                 |                         |                    |                         |                      |                      |               |              |         |                   |                   |                 |
| Foreland        | 0-13            | 0.05-0.10               | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95          | <br>          |              | 1       | <br>  8           | 0                 |                 |
|                 |                 | 1.15-1.40               |                    | 0.04-0.17               |                      |                      | .10           |              | į       | ļ                 | ļ                 |                 |
|                 | 19-60           | 1.40-1.50<br>           | 6-20<br>           | 0.02-0.12               | 0.0-2.9<br>          | 0.2-1.0<br>          | .10<br>       | .15<br>      |         |                   |                   |                 |
| 662:            | i               | j                       | İ                  | j                       | j                    | j                    |               | İ            | İ       |                   |                   |                 |
| Foreland        | 0-13<br>  13-19 | 0.05-0.10               |                    | 0.05-0.35               |                      | 85-95                |               |              | 1       | 8                 | 0                 |                 |
|                 | 19-60           | 1.15-1.40<br> 1.40-1.50 |                    | 0.04-0.17<br> 0.02-0.12 |                      | 1.0-3.0<br>  0.2-1.0 | .10<br>  .10  |              | <br>    | <br>              |                   |                 |
| Coldatas        | į<br>I O 4      | 0.07.0.10               | <br>  0.7.0        | <br> 0.05.050           | į                    | <br>  75.00          | į             | į            | į       | į                 |                   |                 |
| Soldotna        | 0-4<br>  4-7    | 0.07-0.18               | 0.7-2<br>2-6       | 0.35-0.50<br>0.33-0.35  | <br> 00-29           | 75-90<br>  4.0-10    |               | <br>  .43    | 2<br>   | 2<br>             | 134               |                 |
|                 | 7-22            | 0.80-0.90               | 1                  | 0.33-0.35               | 0.0-2.9              | 1.0-6.0              | •             | .43          |         | İ                 |                   |                 |
|                 | 22-29           | 0.90-1.20               | 2-6                | 0.30-0.33               | 0.0-2.9              | 0.1-0.6              | .55           | .49          | į       | ĺ                 | į                 |                 |
|                 | 29-60           | 1.40-1.60               | 6-20               | 0.02-0.04               | 0.0-2.9              | 0.1-0.6              | 1.10          | .10          |         | <br>              |                   |                 |
| Starichkof      | 0-7             | 0.05-0.10               | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95          | <br>          |              | 5       | <br>  8           | 0                 |                 |
|                 | 7-60            | 0.07-0.18               | 0.7-2              | 0.35-0.50               |                      | 75-90                |               |              |         | l<br>I            |                   |                 |
| 663:            | 1               |                         | ]<br>              | <br>                    | i<br>İ               | <br>                 | <br>          | <br>         | l       | <br>              |                   |                 |
| Pits, gravel    |                 | j                       | ļ                  | į                       | ļ                    | ļ                    | ļ             | ļ            | ļ -     |                   | ļ                 |                 |
| 664:            | -               |                         | <br>               | <br>                    | <br>                 | <br>                 | <br>          | <br>         |         | <br>              |                   |                 |
| lliamna         |                 | 0.07-0.18               | 0.6-2              | 0.35-0.50               | j                    | 75-90                |               | j            | 2       | 2                 | 134               |                 |
|                 | 2-29            | 0.60-0.70               | 2-6                | 0.30-0.35               |                      | 2.0-20               | •             | .43          |         |                   | ļ                 |                 |
|                 | 29-60           | 1.30-1.60<br>           | 4-14<br>           | 0.04-0.08<br>           | 0.0-2.9<br>          | 0.2 <b>-</b> 2.0<br> | .05<br>       | .05<br>      |         | <br>              |                   |                 |
| 65:             |                 |                         |                    |                         | į                    | j                    | į             | į            | į       |                   |                   |                 |
| Iliamna         | 0-2<br>  2-29   | 0.07-0.18<br> 0.60-0.70 | 0.6-2<br>  2-6     | 0.35-0.50<br> 0.30-0.35 | <br>  0.0-2.9        | 75-90<br>  2.0-20    |               | <br> .43     | 2       | 2                 | 134               |                 |
|                 | 29-60           | 1.30-1.60               | 1                  | 0.04-0.08               | 0.0-2.9              | 0.2-2.0              |               | .45          |         | <br>              |                   |                 |
| ree.            | į               | į                       | į                  | į                       | į                    | į                    | į             | į            | į       | į                 | į                 |                 |
| 666:<br>Iliamna | <br>  0-2       | <br> 0.07-0.18          | <br>  0.6-2        | <br> 0.35-0.50          | <br>                 | <br>  75-90          | <br>          | <br>         | <br> 2  | <br>  2           | <br>  134         |                 |
|                 | 2-29            | 0.60-0.70               | 2-6                | 0.30-0.35               | 0.0-2.9              | 2.0-20               | .43           | .43          | İ       | İ                 | į                 |                 |
|                 | 29-60           | 1.30-1.60               | 4-14               | 0.04-0.08               | 0.0-2.9              | 0.2-2.0              | .05           | .05          |         |                   |                   |                 |
| 667:            |                 |                         | !<br>              | <br>                    |                      |                      | !<br>         |              |         | <br>              |                   |                 |
| Iliamna, cool   |                 | 0.07-0.18               |                    | 0.35-0.50               | j                    | 75-90                | ļ             | 1            | 2       | 2                 | 134               |                 |
|                 |                 | 0.60-0.70<br> 1.30-1.60 |                    | 0.30-0.35<br> 0.04-0.08 |                      | 2.0-20<br>0.2-2.0    |               | .43<br> .05  |         | <br>              |                   |                 |
|                 | 3               |                         |                    |                         |                      |                      |               |              | į       |                   |                   |                 |
| 668:<br>Island  | <br>  0-1       | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95          | <br>          | <br>         | <br> 3  | <br>  2           | <br>  134         |                 |
|                 | 1-13            | 0.55-0.70               | 2-6                | 0.30-0.35               | 0.0-2.9              | 6.0-10               | .37           | .43          |         | , <i>-</i>        | '04               |                 |
|                 | 13-24           | 0.60-0.75               | 2-6                | 0.30-0.35               | 0.0-2.9              | 2.0-8.0              | .37           | .43          | İ       | j                 | İ                 |                 |
|                 |                 | 1.20-1.60               | 0.7-2              | 0.32-0.35               | 0.0-2.9              | 0.1-1.0              | .37           | .49          |         |                   |                   |                 |
|                 | 33-60<br>       | 1.10-1.20<br>           | 6-20<br>           | 0.12-0.30<br>           | 0.0-2.9<br>          | 0.1-1.0<br>          | .37<br>       | .43<br>      | <br>    | <br>              | <br>              |                 |
| 69:             |                 | <u> </u>                |                    | İ                       | į                    | į                    | į             |              | į_      | _                 |                   |                 |
| sland           | 0-1             | 0.05-0.10               | 6-20               | 0.05-0.35               |                      | 85-95                |               |              | 3       | 2                 | 134               |                 |
|                 | 1-13<br>  13-24 | 0.55-0.70<br>0.60-0.75  | 2-6<br>  2-6       | 0.30-0.35<br> 0.30-0.35 | 0.0-2.9<br>  0.0-2.9 | 6.0-10<br>  2.0-8.0  | .37<br>  .37  | .43<br>  .43 |         | <br>              | <br>              |                 |
|                 | 24-33           | 1.20-1.60               | 0.7-2              | 0.32-0.35               | 0.0-2.9              | 0.1-1.0              | .37           | .49          | i       | !<br>             | i                 |                 |
|                 | 33-60           | 1.10-1.20               | 6-20               | 0.12-0.30               | 0.0-2.9              | 0.1-1.0              |               | .43          | i       | İ                 | i                 |                 |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                        | <br>  Depth | <br>  Moist             | <br>  Permeability | •                       |                    | <br>  Organic     | Eros         | ion fa       | ctors       | Wind<br>  erodi-      | Wind<br>  erodi   |
|-----------------------------------|-------------|-------------------------|--------------------|-------------------------|--------------------|-------------------|--------------|--------------|-------------|-----------------------|-------------------|
| and soil name                     |             | bulk<br>  density<br>   | <br> <br>          | water capacity          | extensi-<br>bility | matter<br> <br>   | <br>  Kw<br> | <br>  Kf     | <br>  T<br> | bility<br>  group<br> | bility<br>  index |
|                                   | In.         | g/cc                    | I                  | I<br>  In/In            | Pct.               | Pct.              | <br>         |              | <br>        | <br>                  |                   |
| 570:<br>Island                    | <br>  0-1   | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>               |                   |              |              | <br> 3      | <br>  2               | <br>  134         |
| Island                            |             | 0.55-0.70               |                    | 0.30-0.35               | 0.0-2.9            | 85-95<br>  6.0-10 | <br>  .37    | <br>  .43    | ا<br>ا      |                       | 134               |
|                                   |             | 0.60-0.75               |                    | 0.30-0.35               | 0.0-2.9            | 2.0-8.0           |              | .43          |             | <br>                  | !                 |
|                                   |             | 11.20-1.60              |                    | 0.32-0.35               | 0.0-2.9            | 0.1-1.0           |              | .43          | <br>        | !<br>!                | !                 |
|                                   |             | 1.10-1.20               |                    | 0.12-0.30               | 0.0-2.9            | 0.1-1.0           |              | .43          | <br>        | <br>                  | ŀ                 |
|                                   |             |                         | 020                |                         |                    |                   | .o,<br>      |              | i           | İ                     | i                 |
| 571:                              | İ           | j                       | İ                  | İ                       | İ                  | İ                 | j            | İ            | İ           | j                     | İ                 |
| Island                            |             | 0.05-0.10               |                    | 0.05-0.35               |                    | 85-95             | !            |              | 3           | 2                     | 134               |
|                                   |             | 0.55-0.70               |                    | 0.30-0.35               |                    | 6.0-10            |              | .43          | ļ           | !                     | !                 |
|                                   |             | 0.60-0.75               |                    | 0.30-0.35               |                    | 2.0-8.0           |              | .43          | ļ           | !                     | ļ                 |
|                                   |             | 1.20-1.60               |                    | 0.32-0.35               | 0.0-2.9            | 0.1-1.0           |              | .49          | ļ           | ļ                     | ļ.                |
|                                   | 33-60       | 1.10-1.20               | 6-20               | 0.12-0.30               | 0.0-2.9            | 0.1-1.0           | .37          | .43          |             |                       |                   |
| 572:                              |             | <br>                    | !<br>              | <br>                    | <br>               | !<br>             | <br>         |              | <br>        | <br>                  |                   |
| Island, forested                  | 0-1         | 0.05-0.10               |                    | 0.05-0.35               | i                  | 85-95             | i            | i            | 3           | 2                     | 134               |
|                                   |             | 0.55-0.70               |                    | 0.30-0.35               | 0.0-2.9            | 6.0-10            |              | .43          |             | [                     |                   |
|                                   |             | 0.60-0.75               | 1                  | 0.30-0.35               | 0.0-2.9            | 2.0-8.0           |              | .43          | ļ           | ļ                     | ļ                 |
|                                   |             | 1.20-1.60               |                    | 0.32-0.35               | 0.0-2.9            | 0.1-1.0           |              | .49          |             |                       | !                 |
|                                   | 33-60       | 1.10-1.20               | 6-20               | 0.12-0.30               | 0.0-2.9            | 0.1-1.0           | .37          | .43          |             |                       |                   |
| 573:                              |             |                         | ]<br>              | <br>                    | ]<br>              | <br>              | <br>         |              | <br>        | <br>                  |                   |
| Kachemak                          | 0-3         | 0.05-0.10               | 6-20               | 0.15-0.35               |                    | 85-95             | <br>         |              | 5           | 2                     | 134               |
|                                   | 3-8         | 0.55-0.85               |                    | 0.25-0.36               | 0.0-2.9            | 8.0-14            |              | .15          | i           | i                     | i                 |
|                                   | 8-30        | 0.55-0.85               | 2-6                | 0.25-0.36               | 0.0-2.9            | 2.0-15            | .37          | .37          | i           | İ                     | İ                 |
|                                   | 30-60       | 1.15-1.50               | 0.2-2              | 0.12-0.25               | 0.0-2.9            | 0.0-0.5           | .49          | .49          | [           | ļ                     | [                 |
| E74:                              |             |                         |                    |                         |                    |                   |              |              |             |                       |                   |
| 574:<br>Kachemak                  | 0-3         | <br> 0.05-0.10          | l<br>l 6-20        | <br> 0.15-0.35          | <br>               | l<br>  85-95      | <br>         | <br>         | l<br>l 5    | <br>  2               | <br>  134         |
| Nacreman                          | 3-8         | 0.55-0.10               |                    | 0.25-0.36               |                    | 8.0-14            | 1.15         |              | 3           | <del>-</del><br>      | 104               |
|                                   |             | 0.55-0.85               |                    | 0.25-0.36               |                    | 2.0-15            |              | .37          | İ           | i                     | i                 |
|                                   |             | 1.15-1.50               | •                  | 0.12-0.25               | 0.0-2.9            | 0.0-0.5           |              | .49          | i           | İ                     | i                 |
|                                   | į           | į                       | į                  | į                       | į                  | į                 | į            | į            | į           | į                     | į                 |
| 575:<br>Kachemak                  |             | 0.05.0.10               |                    | 0 15 0 25               | <br>               |                   |              |              | <br>  5     | <br>  2               | 1 104             |
| Nachemak                          | 3-8         | 0.05-0.10<br> 0.55-0.85 | •                  | 0.15-0.35<br>0.25-0.36  | 1                  | 85-95<br> 8.0-14  |              | <br>  .15    | <b>၁</b>    |                       | 134               |
|                                   |             | 0.55-0.85               |                    | 0.25-0.36               |                    | 2.0-14            |              | .13          | <br>        | <br>                  | !                 |
|                                   |             | 1.15-1.50               |                    | 0.12-0.25               |                    | 0.0-0.5           |              | .49          | İ           | i                     | l                 |
|                                   |             |                         | j                  |                         |                    |                   | İ            | İ            | İ           | İ                     | İ                 |
| 576:                              |             |                         |                    |                         | !                  |                   | ļ            | ļ            |             |                       |                   |
| Kachemak                          |             | 0.05-0.10               |                    | 0.15-0.35               |                    | 1                 |              |              | 1 -         | 2                     | 134               |
|                                   |             | 0.55-0.85               |                    | 0.25-0.36               |                    |                   |              |              |             | !                     |                   |
|                                   |             | 0.55-0.85<br> 1.15-1.50 | •                  | 0.25-0.36<br> 0.12-0.25 |                    | 2.0-15<br>0.0-0.5 | !            | .37<br>  .49 | <br>        | I<br>I                |                   |
|                                   |             |                         | 0.2.2              |                         | 0.0 2.0            | 0.0 0.0           | ,,o<br>      | .¬0<br>      |             |                       |                   |
| 577:                              | į           | İ                       | į                  | į                       | į                  | į                 | į            | İ            | į           | į                     | į                 |
| Kachemak                          |             | 0.05-0.10               |                    | 0.15-0.35               |                    | 85-95             |              |              | 5           | 2                     | 134               |
|                                   | 3-8         | 0.55-0.85               |                    | 0.25-0.36               |                    | 8.0-14            |              | 1.15         | !           | ļ                     |                   |
|                                   |             | 0.55-0.85               | •                  | 0.25-0.36               | 0.0-2.9            | 2.0-15            |              | .37          | <br>        | ļ<br>I                |                   |
|                                   | 30-60       | 1.15-1.50<br>           | 0.2-2<br>          | 0.12-0.25<br>           | U.U-2.9<br>        | 0.0-0.5<br>       | .49<br>      | .49<br>      | <br>        | <br>                  | <br>              |
| 578:                              |             |                         |                    | İ                       | İ                  | İ                 | İ            | i            | İ           |                       |                   |
| Kachemak, cool                    | 0-3         | 0.05-0.10               |                    | 0.15-0.35               | j                  | 85-95             | j            | j            | 5           | į 2                   | 134               |
|                                   | 3-8         | 0.55-0.85               | 2-6                | 0.25-0.36               | 0.0-2.9            | 8.0-14            | .15          | 1.15         |             |                       |                   |
|                                   |             | 0.55-0.85               | •                  | 0.25-0.36               | !                  | 2.0-15            |              | .37          | ļ           | ļ                     | ļ                 |
|                                   | 30-60       | 1.15-1.50               | 0.2-2              | 0.12-0.25               | 0.0-2.9            | 0.0-0.5           | .49          | .49          |             |                       |                   |
| 579:                              |             |                         | !                  | <br>                    | !<br>!             | [<br>             | <br>         |              | l<br>I      | <br>                  |                   |
| Kachemak, cool                    | 0-3         | 0.05-0.10               | <br>  6-20         | 0.15-0.35               | <br>               | <br>  85-95       | <br>         | <br>         | <br>  5     | l<br>  2              | 1 134             |
| , , , , , , , , , , , , , , , , , | 3-8         | 0.55-0.85               |                    | 0.25-0.36               |                    | 8.0-14            | !            | .15          | i           | i                     |                   |
|                                   |             | 0.55-0.85               |                    | 0.25-0.36               |                    |                   |              | .37          | i           | i                     | İ                 |
|                                   |             | 1.15-1.50               | •                  | 0.12-0.25               | •                  | •                 |              | •            |             | i                     | i                 |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                 | <br>  Depth                                   | <br>  Moist                                              | <br>  Permeability                      | •                                                        | <br>  Linear                                 | <br>  Organic                                     | Eros                          | sion fa                       | ctors                    | Wind<br>  erodi-      | Wind<br>  erodi-             |
|----------------------------|-----------------------------------------------|----------------------------------------------------------|-----------------------------------------|----------------------------------------------------------|----------------------------------------------|---------------------------------------------------|-------------------------------|-------------------------------|--------------------------|-----------------------|------------------------------|
| and soil name              |                                               | bulk<br> density                                         | <br> <br>                               | water capacity                                           | extensi-<br>bility                           | matter<br> <br>                                   | <br>  Kw                      | <br>  Kf                      | <br>  T                  | bility<br>  group<br> | bility<br>  index            |
|                            | ln.                                           | g/cc                                                     | In/Hr                                   | In/In                                                    | Pct.                                         | Pct.                                              | ļ                             |                               | ļ                        | !<br>!                |                              |
| 580:<br>Kachemak, cool     | 3-8<br>  8-30                                 | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 |                                              | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .15<br>.37                    | <br> <br> .15<br> .37<br> .49 | <br> <br> 5<br> <br>     | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br> |
| 581:<br>Kachemak, cool     | <br> -<br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .15<br>.37                    | <br> <br> .15<br> .37<br> .49 | <br> <br> 5<br> <br>     | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| 582:<br>Kachemak, cool     | 3-8<br>  8-30                                 | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | 0.0-2.9                                      | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .15<br>.37                    | <br> <br> .15<br> .37<br> .49 | <br> <br> 5<br> <br>     | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| 583:<br>Kachemak, forested | 3-8<br>8-30                                   | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .37                           | <br> <br> .15<br> .37<br> .49 | <br> <br> 5<br> <br>     | <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 584:<br>Kachemak, forested | 3-8<br>  8-30                                 | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 |                                              | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .37                           | <br> <br> .15<br> .37<br> .49 | <br> <br> 5<br> <br>     | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| 585:<br>Kachemak, forested | 3-8<br>  8-30                                 | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | .37                           | <br> <br> .15<br> .37<br> .49 | <br> -<br> 5<br> -<br> - | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| 586:<br>Kachemak, cool     | 3-8<br>8-30                                   | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | 2-6<br>  2-6                            | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | 0.0-2.9                                      | 2.0-15                                            | .15<br>.37                    | .37                           | <br> <br> 5<br> <br>     | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| Snowdance                  | 3-8<br>8-24                                   | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80 |                                         | <br> 0.05-0.35<br> 0.32-0.34<br> 0.32-0.34<br> 0.06-0.08 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  6.0-20<br>  2.0-8.0<br>  0.2-2.0 | <br> <br> .37<br> .43<br> .05 | <br> <br> .43<br> .49<br> .15 | <br> 2<br> <br> <br>     | <br>  8<br> <br> <br> | <br>  0<br> <br> <br>        |
| 587:<br>Kachemak, cool     | <br>-  0-3<br>  3-8<br>  8-30<br>  30-60      | <br> 0.05-0.10<br> 0.55-0.85<br> 0.55-0.85<br> 1.15-1.50 | <br>  6-20<br>  2-6<br>  2-6<br>  0.2-2 | <br> 0.15-0.35<br> 0.25-0.36<br> 0.25-0.36<br> 0.12-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  8.0-14<br>  2.0-15<br>  0.0-0.5  | <br> <br> .15<br> .37<br> .49 | <br> <br> .15<br> .37<br> .49 | <br> 5<br> <br>          | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| Snowdance                  | <br>  0-3<br>  3-8<br>  8-24<br>  24-60       | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80 | 2-6<br>  2-6                            | <br> 0.05-0.35<br> 0.32-0.34<br> 0.32-0.34<br> 0.06-0.08 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br> 6.0-20<br> 2.0-8.0<br> 0.2-2.0    |                               | <br> <br> .43<br> .49<br> .15 | <br> 2<br> <br>          | <br>  8<br> <br>      | <br>  0<br> <br>             |

Table 10. Physical Properties of the Soils—Continued

| Map symbol             | <br>  Depth     | <br>  Moist             | <br>  Permeability |                         |                      | <br>  Organic       | Eros         | ion fa       | ctors            | Wind<br>  erodi-      | Wind<br>  erodi   |
|------------------------|-----------------|-------------------------|--------------------|-------------------------|----------------------|---------------------|--------------|--------------|------------------|-----------------------|-------------------|
| and soil name          | <br> <br>       | bulk<br> density<br>    | <br> <br>          | water capacity          | extensi-<br>bility   | matter<br> <br>     | <br>  Kw<br> | <br>  Kf     | <br>  T<br>      | bility<br>  group<br> | bility<br>  index |
|                        | ln.             | g/cc                    | In/Hr              | <br>  In/In             | Pct.                 | Pct.                |              |              | <br>             | <br>                  |                   |
| 588:                   |                 |                         |                    |                         |                      |                     |              |              |                  | <br>                  |                   |
| ooo.<br>Kachemak, cool | l<br>·  0-3     | 0.05-0.10               | 6-20               | 0.15-0.35               | <br>                 | <br>  85-95         | <br>         | <br>         | l<br>  5         | <br>  2               | <br>  134         |
|                        | 3-8             | 0.55-0.85               | 2-6                | 0.25-0.36               | 0.0-2.9              | 8.0-14              | .15          | .15          |                  | i                     |                   |
|                        | 8-30            | 0.55-0.85               | 2-6                | 0.25-0.36               | 0.0-2.9              | 2.0-15              | .37          | .37          | ļ                | ļ                     | !                 |
|                        | 30-60           | 1.15-1.50               | 0.2-2              | 0.12-0.25               | 0.0-2.9              | 0.0-0.5             | .49          | .49          | <br>             | <br>                  |                   |
| Snowdance              | 0-3             | 0.05-0.10               | 6-20               | 0.05-0.35               | <br>                 | <br>  85-95         | <br>         |              | 2                | <br>  8               | 0                 |
|                        | 3-8             | 0.75-0.90               |                    | 0.32-0.34               | 0.0-2.9              | 6.0-20              | .37          | .43          | İ                | j                     | İ                 |
|                        | 8-24            | 0.75-0.90               |                    | 0.32-0.34               | 0.0-2.9              | 2.0-8.0             | .43          | .49          |                  | ļ                     | ļ                 |
|                        | 24-60           | 1.60-1.80               | 0.2-2              | 0.06-0.08               | 0.0-2.9              | 0.2-2.0             | .05<br>      | .15<br>      | <br>             | <br>                  |                   |
| 89:                    |                 |                         | İ                  | <u> </u>                | !<br>                |                     | İ            | İ            | <u> </u>         | !<br>                 | i                 |
| Kalifonsky             |                 | 0.07-0.18               |                    | 0.35-0.50               | j                    | 75-90               | j            |              | 1                | 8                     | 0                 |
|                        | 2-9             | 0.70-0.90               | 2-6                | 0.28-0.32               | 0.0-2.9              | 2.0-10              | .37          | .37          |                  | ļ                     |                   |
|                        | 9-16<br>  16-60 | 0.90-1.10<br>1.40-1.60  | 2-6<br>  6-20      | 0.22-0.26<br>0.05-0.07  | 0.0-2.9              | 0.2-2.0             | •            | .43<br> .10  | i<br>i           | <br>                  | <br>              |
|                        | .5 50           |                         | 520                |                         | 0.0 2.0              | 0.2 1.0             | i            |              | İ                |                       |                   |
| 90:                    |                 |                         |                    | <u> </u>                | į                    |                     | į            | ļ            | į .              |                       |                   |
| Kalifonsky             |                 | 0.07-0.18               | •                  | 0.35-0.50               |                      | 75-90               |              |              | 1                | 8                     | 0                 |
|                        | 2-9<br>  9-16   | 0.70-0.90<br>0.90-1.10  | 2-6<br>  2-6       | 0.28-0.32               | 0.0-2.9              | 2.0-10<br>0.2-2.0   | .37<br>  .43 | .37<br>  .43 | <br>             | <br>                  |                   |
|                        |                 | 1.40-1.60               | 6-20               | 0.05-0.07               | 0.0-2.9              | 0.2-1.0             | •            | .10          |                  | İ                     | İ                 |
| 0.1                    |                 |                         | ļ                  |                         |                      |                     | ļ            |              |                  |                       | ĺ                 |
| 91:<br>Kalifonsky      | <br>  0-2       | <br> 0.07-0.18          | <br>  0.6-2        | <br> 0.35-0.50          | <br>                 | <br>  75-90         | <br>         | <br>         | <br>  1          | <br>  8               | <br>  0           |
| Kamonsky               | 2-9             | 0.70-0.90               |                    | 0.28-0.32               | 0.0-2.9              | 2.0-10              | <br> .37     | .37          | ¦ '              | U                     | 0                 |
|                        | 9-16            | 0.90-1.10               | 2-6                | 0.22-0.26               | 0.0-2.9              | 0.2-2.0             | .43          | .43          | İ                | İ                     | İ                 |
|                        | 16-60           | 1.40-1.60               | 6-20               | 0.05-0.07               | 0.0-2.9              | 0.2-1.0             | .10          | .10          |                  |                       |                   |
| Гуріс Cryorthents      | <br>-  0-1      | 0.05-0.10               | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95         | <br>         | <br>         | <br>  5          | <br>  3               | l<br>l 86         |
| Typio Gryeraterite     | 1-33            | 1.25-1.70               | 0.06-6             | 0.16-0.27               | 0.0-5.9              | 0.1-0.5             | .37          | .49          |                  |                       |                   |
|                        | 33-60           | 1.35-1.80               | 0.06-6             | 0.12-0.27               | 0.0-5.0              | 0.0-0.2             | .32          | .43          | į                | ĺ                     | į                 |
| 92:                    |                 |                         |                    |                         | <br>                 |                     | <br>         |              | <br>             | <br>                  |                   |
| эг.<br>Karluk          | 0-3             | 0.20-0.30               | 0.001-0.06         | 0.40-0.55               |                      | <br>  60-85         | <br>         |              | <br>  5          | <br>  2               | 1 134             |
|                        |                 | 0.40-0.80               |                    | 0.20-0.26               | 0.0-2.9              | 2.0-10              |              | .32          | İ                | İ                     | į                 |
|                        |                 | 1.10-1.45               |                    | 0.20-0.26               | 0.0-2.9              | 1.0-4.0             |              | .37          | !                |                       | !                 |
|                        | 17-60           | 1.60-1.90               | 0.2-2              | 0.20-0.26               | 0.0-2.8              | 0.0-1.0             | .37          | .37          | <br>             | <br>                  |                   |
| 93:                    | i               |                         | i                  |                         | <br>                 | i                   | <br>         |              | <br>             | <br>                  | l                 |
| Kashwitna              |                 |                         |                    | 0.05-0.35               |                      | 1                   | ı            | ļ            | 2                | 2                     | 134               |
|                        | 3-5             | 0.80-0.90               |                    | 0.30-0.34               |                      | 2.0-10              |              | .37          |                  |                       |                   |
|                        | 5-21<br>  21-60 | 0.80-0.90<br> 1.50-1.60 | 2-6<br>  6-20      | 0.30-0.34<br> 0.03-0.05 | 0.0-2.9<br>  0.0-2.9 | 4.0-10<br>  0.2-1.0 |              | .49<br>  .24 | i<br>i           | <br>                  | <br>              |
|                        |                 |                         | 0.20               |                         | 0.0 2.0              | 0.2 1.0             | .55          |              | İ                |                       |                   |
| 94:                    |                 |                         |                    |                         | į                    |                     | į            | ļ            |                  |                       | į                 |
| Kashwitna              | 0-3             | 0.05-0.10<br>0.80-0.90  |                    | 0.05-0.35               |                      | 85-95               |              |              | 2                | 2                     | 134               |
|                        | 3-5<br>  5-21   | 0.80-0.90               |                    | 0.30-0.34<br> 0.30-0.34 | 0.0-2.9<br>  0.0-2.9 | 2.0-10<br>  4.0-10  | •            | .37<br>  .49 | <br>             | <br>                  |                   |
|                        |                 | 1.50-1.60               | 6-20               | 0.03-0.05               | 0.0-2.9              | 0.2-1.0             | •            | .24          | İ                |                       |                   |
| 0.5                    |                 |                         |                    |                         | ļ                    |                     | ļ            | ļ            | !                |                       |                   |
| 95:<br>Kashwitna       | <br>-  0-3      | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95         | <br>         | <br>         | <br> 2           | <br>  2               | <br>  134         |
| \aonwilla              | 0-3<br>  3-5    | 0.80-0.10               | 6-20               |                         | 0.0-2.9              | 2.0-10              | <br>  .37    | <br> .37     | <del>-</del><br> | <b>-</b><br>          | 134               |
|                        | 5-21            | 0.80-0.90               | 2-6                | 0.30-0.34               | 0.0-2.9              | 4.0-10              |              | .49          | İ                | j                     | İ                 |
|                        | 21-60           | 1.50-1.60               | 6-20               | 0.03-0.05               | 0.0-2.9              | 0.2-1.0             | .05          | .24          |                  | 1                     | 1                 |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                    | <br>  Depth              | Moist                                                                  | <br>  Permeability                                   | •                                                                      |                                                      | <br>  Organic                                           | Eros                                 | ion fa                                | ctors                | Wind<br>  erodi-      | Wind<br>  erodi             |
|-------------------------------|--------------------------|------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------|--------------------------------------|---------------------------------------|----------------------|-----------------------|-----------------------------|
| and soil name                 | <br> <br>                | bulk<br> density<br>                                                   | <br> <br>                                            | water capacity                                                         | extensi-<br>bility                                   | matter<br> <br>                                         | <br>  Kw<br>                         | <br>  Kf<br>                          | <br>  T<br>          | bility<br>  group<br> | bility<br>  index<br>       |
|                               | In.                      | g/cc                                                                   | <br>  In/Hr                                          | <br>  In/In                                                            | Pct.                                                 | Pct.                                                    | <br>                                 | <u> </u>                              | <br>                 | <br>                  |                             |
| 596:                          | [<br>                    |                                                                        | <br>                                                 | <br>                                                                   | <br>                                                 | <br>                                                    | <br>                                 | <br>                                  | [<br>[               | <br>                  | <br>                        |
| Kashwitna, moderately steep - | 3-5<br>  5-21            | 0.05-0.10<br> 0.80-0.90<br> 0.80-0.90<br> 1.50-1.60                    | 6-20<br>2-6<br>2-6<br>6-20                           | 0.05-0.35<br> 0.30-0.34<br> 0.30-0.34<br> 0.03-0.05                    | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9              | 85-95<br>2.0-10<br>4.0-10<br>0.2-1.0                    | <br>  .37<br>  .43<br>  .05          | <br>  .37<br>  .49<br>  .24           | <br> <br> <br>       | 2<br> <br> <br>       | 134<br> <br> <br> <br>      |
| Kashwitna, strongly sloping   | 3-5<br>5-21              | 0.05-0.10<br> 0.80-0.90<br> 0.80-0.90<br> 1.50-1.60                    | <br>  6-20<br>  2-6<br>  2-6<br>  6-20               | <br> 0.05-0.35<br> 0.30-0.34<br> 0.30-0.34<br> 0.03-0.05               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9         | <br>  85-95<br>  2.0-10<br>  4.0-10<br>  0.2-1.0        | <br> <br> .37<br> .43<br> .05        | <br> <br> .37<br> .49<br> .24         | <br> 2<br> <br> <br> | <br>  2<br> <br>      | <br>  134<br> <br> <br>     |
| 97:                           | <br>                     |                                                                        | !<br>                                                | <br>                                                                   |                                                      |                                                         | <br>                                 | <br>                                  | <br>                 | !<br>                 |                             |
| Kenai                         | 2-6<br>6-19<br>19-24     | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      | 0.7-2<br>  2-6<br>  2-6<br>  2-6<br>  0.06-0.2       | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>  2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0 | <br>  .37<br>  .43<br>  .43<br>  .43 | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br> <br> |
| 98:                           |                          |                                                                        |                                                      |                                                                        |                                                      |                                                         |                                      |                                       |                      |                       |                             |
| Kenai                         | 2-6<br>6-19<br>19-24     | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      | 0.7-2<br>  2-6<br>  2-6<br>  2-6<br>  0.06-0.2       | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>  2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0 | <br>  .37<br>  .43<br>  .43<br>  .43 | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br> <br>      |
| 99:                           | <br>                     | <br>                                                                   | <br>                                                 | <br>                                                                   | <br>                                                 | <br>                                                    | <br>                                 | <br>                                  | <br>                 | <br>                  | <br>                        |
| Kenai                         | 2-6<br>  6-19            | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      | 2-6<br>  2-6<br>  2-6                                | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>2.0-10<br>4.0-10<br>0.3-1.5<br>0.2-1.0         | <br>  .37<br>  .43<br>  .43<br>  .43 | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br> <br> |
| 00:                           | <br>                     |                                                                        | <br>                                                 | <br>                                                                   | <br>                                                 | <br>                                                    | <br>                                 | <br>                                  | <br>                 | <br>                  | <br>                        |
| Kenai                         | 2-6<br>  6-19<br>  19-24 | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      | 2-6<br>  2-6                                         | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>  2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0 | .43                                  | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br> <br> |
| 01:                           | <br>                     | <br>                                                                   | <br>                                                 | <br>                                                                   | i<br>İ                                               | <br>                                                    | <br>                                 | <br>                                  | <br>                 | <br>                  |                             |
| Kenai                         | 2-6<br>6-19<br>19-24     | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      | 2-6                                                  | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br> 2.0-10<br> 4.0-10<br> 0.3-1.5<br> 0.2-1.0     | .37<br>  .43<br>  .43                | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br>      |
| 602:                          |                          |                                                                        | <u> </u>                                             | <u> </u>                                                               | <u> </u>                                             | <u> </u>                                                |                                      |                                       | <u> </u>             |                       |                             |
| Kenai, moderately steep       | 2-6<br>6-19<br>19-24     | 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80      |                                                      | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>  2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0 | <br>  .37<br>  .43<br>  .43<br>  .43 | <br>  .37<br>  .43<br>  .49<br>  .49  | 3<br> <br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br> <br>      |
| Kenai, gently sloping         | 2-6<br>6-19<br>19-24     | <br> 0.07-0.18<br> 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80 | <br>  0.7-2<br>  2-6<br>  2-6<br>  2-6<br>  0.06-0.2 | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9 | 75-90<br>  2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0 | <br>  .37<br>  .43<br>  .43<br>  .43 | <br> <br> .37<br> .43<br> .49<br> .49 | <br> 3<br> <br> <br> | <br>  2<br> <br> <br> | <br>  134<br> <br> <br>     |

Table 10. Physical Properties of the Soils—Continued

| Map symbol    | <br>  Depth     | <br>  Moist             | <br>  Permeability | •                       | <br>  Linear         | <br>  Organic       | Eros         | ion fa       | ctors       | Wind<br>  erodi-  | Wind<br>  erodi   |
|---------------|-----------------|-------------------------|--------------------|-------------------------|----------------------|---------------------|--------------|--------------|-------------|-------------------|-------------------|
| and soil name |                 | bulk density            |                    | water capacity          | extensi-<br>bility   | matter<br>          | j<br>  Kw    | <br>  Kf     | <br>  T<br> | bility<br>  group | bility<br>  index |
|               |                 | <br>  g/cc              | <br>  In/Hr        | <br>  In/In             | Pct.                 | Pct.                | <br>         |              | <br>        | <br>              |                   |
| 603:          |                 |                         | <br>               |                         | <br>                 |                     |              |              | <br>        | <br>              |                   |
| Kenai         | 0-2             | 0.07-0.18               |                    | 0.35-0.50               | i                    | 75-90               | <br>         | <br>         | 3           | 2                 | 134               |
|               | 2-6             | 0.70-0.80               | •                  | 0.33-0.35               | 0.0-2.9              | 2.0-10              | .37          | .37          |             | ļ                 |                   |
|               |                 | 0.70-1.10<br> 1.20-1.80 |                    | 0.33-0.35<br> 0.33-0.35 | 0.0-2.9              | 4.0-10<br>  0.3-1.5 | .43<br>  .43 | .43<br>  .49 | <br>        | <br>              |                   |
|               |                 | 1.50-1.80               |                    | 0.25-0.27               | 3.0-5.9              | 0.2-1.0             | .43          | .49          |             |                   |                   |
| Starichkof    | 0-7             | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95         | <br>         | <br>         | <br>  5     | <br>  8           | <br>  0           |
| Otanonikoi    | 7-60            | 0.07-0.18               | •                  | 0.35-0.50               |                      | 75-90               |              |              |             |                   |                   |
| 604:          |                 |                         | <br>               | <br>                    | <br>                 | <br>                |              |              | <br>        | <br>              |                   |
| Kichatna      | 0-2             | 0.07-0.18               |                    | 0.32-0.35               | i                    | 40-70               | <br>         | <br>         | 1           | 2                 | 134               |
|               | 2-4             | 0.65-0.90               |                    | 0.31-0.37               | 0.0-2.9              | 2.0-8.0             | .37          | .37          |             |                   |                   |
|               |                 | 0.65-0.90<br> 1.50-1.60 |                    | 0.31-0.37<br> 0.04-0.08 | 0.0-2.9              | 4.0-10<br>  2.0-6.0 | .37<br> .10  | .37<br>  .24 | <br>        | <br>              |                   |
|               |                 | 1.50-1.80               | 6-20               | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             |              | .24          |             |                   |                   |
| 605:          |                 |                         | <br>               | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>        | <br>              |                   |
| Kichatna      | 0-2             | 0.07-0.18               | 2-6                | 0.32-0.35               | <br>                 | <br>  40-70         | <br>         | <br>         | 1           | 2                 | 134               |
|               | 2-4             | 0.65-0.90               | •                  | 0.31-0.37               | 0.0-2.9              | 2.0-8.0             | •            | .37          | !           |                   |                   |
|               |                 | 0.65-0.90<br> 1.50-1.60 | •                  | 0.31-0.37<br>0.04-0.08  | 0.0-2.9              | 4.0-10<br>  2.0-6.0 | •            | .37<br>  .24 | <br>        |                   |                   |
|               |                 | 1.50-1.80               |                    | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             |              | .24          | <br>        | <br>              |                   |
| 06:           |                 |                         |                    |                         |                      |                     |              |              |             |                   |                   |
| Kichatna      | 0-2             | 0.07-0.18               | 2-6                | 0.32-0.35               | <br>                 | 40-70               | ¦            | i            | 1           | 2                 | 134               |
|               | 2-4             | 0.65-0.90               |                    | 0.31-0.37               | 0.0-2.9              | 2.0-8.0             | .37          | .37          | į           | į                 | į                 |
|               |                 | 0.65-0.90<br> 1.50-1.60 |                    | 0.31-0.37<br> 0.04-0.08 | 0.0-2.9              | 4.0-10<br>  2.0-6.0 | .37<br> .10  | .37<br>  .24 |             |                   |                   |
|               |                 | 1.50-1.80               |                    | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             | •            | .24          | <br>        | !<br>             |                   |
| 607:          |                 |                         | <br>               |                         |                      |                     | <br>         |              | <br>        | <br>              |                   |
| Kichatna      |                 | 0.07-0.18               | •                  | 0.32-0.35               | i                    | 40-70               | <br>         | <br>         | 1           | 2                 | 134               |
|               | 2-4             | 0.65-0.90               |                    | 0.31-0.37               |                      | 2.0-8.0             |              | .37          |             | ļ                 |                   |
|               |                 | 0.65-0.90<br> 1.50-1.60 |                    | 0.31-0.37<br>0.04-0.08  | 0.0-2.9              | 4.0-10<br>  2.0-6.0 |              | .37<br>  .24 | <br>        | <br>              | l<br>I            |
|               |                 | 1.50-1.80               |                    | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             |              | .24          |             |                   |                   |
| 08:           |                 |                         | <br>               | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>        | <br>              |                   |
| Kichatna      |                 | 0.07-0.18               |                    | 0.32-0.35               |                      | 40-70               | i            |              | 1           | 2                 | 134               |
|               |                 | 0.65-0.90               |                    | 0.31-0.37               |                      |                     |              |              |             | ļ                 |                   |
|               |                 | 0.65-0.90<br> 1.50-1.60 | •                  | 0.31-0.37<br> 0.04-0.08 |                      | 4.0-10<br>  2.0-6.0 | :            | .37<br>  .24 | <br>        | <br>              |                   |
|               |                 | 1.50-1.80               | •                  | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             | •            | .24          |             |                   |                   |
| 09:           |                 |                         | <br>               | <br>                    | <br>                 | <br>                | <br>         | <br>         | <br>        | <br>              | <br>              |
| Kichatna      |                 | 0.07-0.18               | !                  | 0.32-0.35               | i                    | 40-70               |              |              | 1           | 2                 | 134               |
|               | 2-4             | 0.65-0.90               |                    | 0.31-0.37               | 0.0-2.9              | 2.0-8.0             | .37          | .37          |             |                   |                   |
|               | 4-11<br>  11-14 | 0.65-0.90<br> 1.50-1.60 |                    | 0.31-0.37<br> 0.04-0.08 | 0.0-2.9<br>  0.0-2.9 | 4.0-10<br>  2.0-6.0 | !            | .37<br>  .24 | <br>        | <br>              |                   |
|               |                 | 1.50-1.80               | 6-20               | 0.03-0.05               | 0.0-2.9              | 0.3-0.9             | .05          | .24          |             |                   |                   |
| (illey        | 0-2             | <br> 0.05-0.10          | <br>  6-20         | <br> 0.05-0.35          | <br>                 | <br>  85-95         | <br>         | <br>         | <br> 2      | <br>  1           | <br>  160         |
| ano y         | 2-6             | 0.80-0.90               | •                  | 0.25-0.27               | 1                    | 4.0-8.0             | .37          | .37          | <b>-</b>    | i                 | .00               |
|               | 6-29            | 0.90-1.00               | 0.6-2              | 0.17-0.20               | 0.0-2.9              | 0.2-2.0             | .28          | .28          | į           | į                 | į                 |
|               | 29-60           | 1.50-1.60               | 6-20<br>           | 0.02-0.04               | 0.0-2.9<br>          | 0.2-2.0             | .05<br>      | .17<br>      | <br>        | <br>              |                   |
| 10:           |                 |                         |                    |                         | į                    | ļ                   |              |              |             | <u> </u>          |                   |
| Kidazqeni     |                 | 0.80-1.00               |                    | 0.23-0.25               |                      | 2.0-4.0             |              | 37           | 2           | 1                 | 160               |
|               | •               | 0.90-1.10<br> 1.50-1.60 | •                  | 0.15-0.18<br>0.02-0.04  | •                    |                     | .32<br>  .05 | •            | <br>        | !<br>!            |                   |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                  | Depth                                               | <br>  Moist                                                            | <br>  Permeability                                  | •                                                                      | •                                                        | <br>  Organic                                                  | Eros                                  | ion fa                                   | ctors                     | Wind<br>  erodi-           | Wind<br>  erodi                   |
|-----------------------------|-----------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|---------------------------------------|------------------------------------------|---------------------------|----------------------------|-----------------------------------|
| and soil name               |                                                     | bulk<br> density<br>                                                   | <br> <br>                                           | water<br>  capacity<br>                                                | extensi-<br>bility                                       | matter<br> <br>                                                | <br>  Kw<br>                          | <br>  Kf<br>                             | <br>  T<br>               | bility<br>  group<br>      | bility<br>  index                 |
|                             | ln.                                                 | g/cc                                                                   | In/Hr                                               | In/In                                                                  | Pct.                                                     | Pct.                                                           | <br>                                  | ļ                                        | ļ                         | <br>                       |                                   |
| 611:<br>Killey              | <br> <br>-  0-2<br>  2-6<br>  6-29                  | <br> 0.05-0.10<br> 0.80-0.90<br> 0.90-1.00                             | <br> <br>  6-20<br>  0.6-2<br>  0.6-2               | <br> 0.05-0.35<br> 0.25-0.27<br> 0.17-0.20                             | <br> <br> <br>  0.0-2.9<br>  0.0-2.9                     | <br> <br>  85-95<br>  4.0-8.0<br>  0.2-2.0                     | .37                                   | <br> <br> <br> .37<br> .28               | <br> <br> 2<br> <br>      | <br> <br>  1<br>           | <br> <br>  160<br>                |
| Moose River                 | <br>-  0-5<br>  5-10<br>  10-39                     | 1.50-1.60<br> <br> 0.05-0.10<br> 0.80-0.90<br> 0.90-1.30<br> 1.50-1.60 | 6-20<br> <br>  6-20<br>  0.6-2<br>  0.6-2<br>  6-20 | 0.02-0.04<br> <br> 0.05-0.35<br> 0.25-0.27<br> 0.11-0.15<br> 0.03-0.05 | 0.0-2.9<br> <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 0.2-2.0<br> <br>  85-95<br>  4.0-10<br>  0.2-2.0<br>  0.2-2.0  | <br> <br> .43<br> .15                 | .17<br> <br> <br>  .43<br>  .24<br>  .24 | <br> <br> 2<br> <br>      | <br> <br>  8<br> <br>      | <br> <br>  0<br> <br>             |
| 612:<br>Liten               | <br> <br>-  0-2<br>  2-8<br>  8-60                  | <br> 0.05-0.10<br> 0.90-1.00<br> 1.20-1.30                             | <br> <br>  6-20<br>  2-6<br>  6-20                  | <br> 0.05-0.35<br> 0.32-0.35<br> 0.04-0.08                             | <br> <br> <br>  0.0-2.9<br>  0.0-2.9                     | <br>  85-95<br>  5.0-9.0<br>  0.0-0.2                          | .28                                   | <br> <br> .28<br> .10                    | <br> <br> 1<br> <br>      | <br> <br>  1<br>           | <br> <br>  160<br>                |
| 613:<br>Lithic Haplocryands | <br> -<br>  0-2<br>  2-12<br>  12-60                | <br> 0.05-0.10<br> 0.60-0.70<br>                                       | <br>  6-20<br>  0.6-2<br>  0.000-0.001              | <br> 0.05-0.35<br> 0.30-0.35<br>                                       | <br> <br> <br>  0.0-2.9<br>                              | <br> <br>  85-95<br>  8.0-15<br>                               | <br> <br> .15<br>                     |                                          | <br> <br>  1<br> <br>     | <br> <br>  2<br>           | <br> <br>  134<br> <br>           |
| Alic Haplocryands           | 4-21                                                | <br> 0.07-0.18<br> 0.75-0.90<br> 1.60-1.80<br>                         | 2-6                                                 | <br> 0.35-0.50<br> 0.34-0.36<br> 0.06-0.08<br>                         | <br> <br> 0.0-2.9<br> 0.0-2.9<br>                        | <br>  75-90<br>  4.0-10<br>  0.2-2.0<br>                       | <br> <br> .05<br> .10<br>             | <br> <br> .28<br> .24<br>                | <br> 2<br> <br> <br>      | <br>  2<br> <br>           | <br>  134<br> <br> <br>           |
| Rock outcrop                | <br>-                                               |                                                                        | <br>                                                | <br>                                                                   | <br>                                                     | <br>                                                           | <br>                                  | <br>                                     | <br> -                    | <br>                       |                                   |
| 614:<br>Lithic Haplocryands | <br> -<br>  0-2<br>  2-12<br>  12-60                | <br> 0.05-0.10<br> 0.60-0.70<br>                                       |                                                     | <br> 0.05-0.35<br> 0.30-0.35<br>                                       | <br> <br> <br> 0.0-2.9<br>                               | <br>  85-95<br> 8.0-15<br>                                     | <br> <br> .15<br>                     | <br> <br> .28<br>                        | <br> <br>  1<br> <br>     | <br> <br>  2<br>           | <br> <br>  134<br>                |
| Alic Haplocryands           | 4-21                                                | <br> 0.07-0.18<br> 0.75-0.90<br> 1.60-1.80<br>                         | 2-6                                                 | <br> 0.35-0.50<br> 0.34-0.36<br> 0.06-0.08<br>                         | <br> <br> 0.0-2.9<br> 0.0-2.9<br>                        | <br>  75-90<br>  4.0-10<br>  0.2-2.0<br>                       | .05                                   | <br> <br> .28<br> .24<br>                | <br> 2<br> <br> <br>      | <br>  2<br> <br>           | <br>  134<br> <br> <br>           |
| Rock outcrop                | <br>-                                               |                                                                        | <br>                                                | <br>                                                                   | <br>                                                     | <br>                                                           | <br>                                  | <br>                                     | <br> -                    | <br>                       |                                   |
| 615:<br>Longmare            | <br>-  0-3<br>  4-6<br>  6-18<br>  18-29<br>  29-60 | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | <br>  0.7-2<br>  2-6<br>  2-6<br>  2-6<br>  6-20    | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | <br> <br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9                | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6       | <br> <br> .43<br> .43<br> .55<br> .10 | <br> <br> .43<br> .43<br> .49<br> .10    | <br> 2<br> <br> <br> <br> | <br>  2<br> <br> <br> <br> | <br>  134<br> <br> <br> <br> <br> |
| 616:<br>Longmare            | <br>                                                | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 0.7-2<br>2-6<br>2-6<br>2-6<br>2-6<br>6-20           | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9             | <br>  75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br> <br> .43<br> .43<br> .55<br> .10 | <br> <br> .43<br> .43<br> .49<br> .10    | <br> 2<br> <br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br> <br>      |
| 617:<br>Mutnala             | <br> <br>-  0-4<br>  4-7<br>  7-23<br>  23-60       | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30               | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.7-2            | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18               | <br> <br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9                | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1              | <br> <br> .37<br> .43<br> .24         | <br> <br> .37<br> .43<br> .43            | <br> 2<br> <br> <br> <br> | <br> <br>  2<br> <br> <br> | <br> <br>  134<br> <br> <br>      |

Table 10. Physical Properties of the Soils—Continued

| Map symbol       | <br>  Depth     | <br>  Moist                                              | <br>  Permeability                       | <br>  Available                                          | <br>  Linear                                 | <br>  Organic                                      | Eros                          | sion fa                       | ctors                     | Wind<br>  erodi-           | Wind<br>  erodi-             |
|------------------|-----------------|----------------------------------------------------------|------------------------------------------|----------------------------------------------------------|----------------------------------------------|----------------------------------------------------|-------------------------------|-------------------------------|---------------------------|----------------------------|------------------------------|
| and soil name    |                 | bulk density                                             |                                          | water capacity                                           | extensi-<br>bility                           | matter                                             | <br>  Kw                      | <br>  Kf                      | <br>  T                   | bility<br>  group          | bility<br>  index            |
|                  |                 | g/cc                                                     | In/Hr                                    | In/In                                                    | Pct.                                         | Pct.                                               | ļ                             |                               | <u> </u>                  | !<br>!                     | ļ                            |
| 618:<br>Mutnala  | 4-7<br>  7-23   | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30 |                                          | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1  | <br> <br> .37<br> .43<br> .24 | <br> <br> .37<br> .43<br> .43 | <br> <br> 2<br> <br>      | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 619:             |                 | <br>                                                     | <br>                                     | <br>                                                     | <br>                                         | <br>                                               | <br>                          | <br>                          | <br>                      | <br>                       | <br>                         |
| Mutnala          | 4-7<br>  7-23   | 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30      |                                          | 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18      |                                              | 75-90<br>5.0-20<br>2.0-8.0<br>0.0-0.1              | .37<br>.43                    | <br>  .37<br>  .43<br>  .43   | 2<br> <br> <br> <br>      | 2<br> <br> <br>            | 134<br> <br> <br> <br>       |
| 620:<br>Mutnala  | 4-7<br>  7-23   | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30 | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.7-2 | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1  |                               | <br> <br> .37<br> .43<br> .43 | <br> 2<br> <br> <br>      | <br>  2<br>                | <br>  134<br> <br>           |
| 621:<br>Mutnala  | 4-7<br>  7-23   | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30 | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.7-2 | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18 | 0.0-2.9                                      | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1  | .37<br>.43                    | <br> <br> .37<br> .43<br> .43 | <br> <br> 2<br> <br>      | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 522:<br>Mutnala  | 4-7<br>  7-23   | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30 | 2-6                                      | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1  | <br> <br> .37<br> .43<br> .24 | <br> <br> .37<br> .43<br> .43 | <br> 2<br> <br> <br>      | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br> <br> |
| 523:<br>Mutnala  | 4-7<br>  7-23   | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.30 | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.7-2 | <br> 0.35-0.50<br> 0.30-0.35<br> 0.30-0.35<br> 0.15-0.18 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  5.0-20<br>  2.0-8.0<br>  0.0-0.1  |                               | <br> <br> .37<br> .43<br> .43 | <br> 2<br> <br> <br>      | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| Starichkof       |                 | <br> 0.05-0.10<br> 0.07-0.18                             | <br>  6-20<br>  0.7-2                    | <br> 0.05-0.35<br> 0.35-0.50                             | <br> <br>                                    | <br>  85-95<br>  75-90                             | <br> <br>                     | <br> <br>                     | <br> 5<br>                | <br>  8<br>                | <br>  0<br>                  |
| Slikok           | 13-51           | <br> 0.20-0.30<br> 0.40-0.60<br> 1.50-1.80               |                                          | <br> 0.40-0.55<br> 0.28-0.30<br> 0.25-0.27               | 0.0-2.9                                      | <br>  60-85<br>  8.0-20<br>  0.2-2.0               | .28                           | <br> <br> .37<br> .64         | <br> 2<br> <br>           | <br>  8<br> <br>           | <br>  0<br> <br>             |
| 624:<br>Naptowne | 3-14<br>13-20   | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.6-6 | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5       | .37                           | <br> <br> .37<br> .37<br> .37 | <br> 2<br> <br> <br>      | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br>      |
| 625:<br>Naptowne | 3-14<br>  13-20 | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | <br>  0.6-2<br>  2-6<br>  2-6<br>  0.6-6 | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5 | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> <br> 2<br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br>      |
| 626:<br>Naptowne | 3-14<br>  13-20 | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | 2-6<br>2-6                               | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | 0.0-2.9                                      | <br>  75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5 | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> <br> 2<br> <br> <br> | <br> <br>  2<br> <br> <br> | <br> <br>  134<br> <br>      |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                         | <br>  Depth                               | <br>  Moist                                              | <br>  Permeability           | <br>  Available                                          | <br> Linear                                  | <br>  Organic                                      | Eros                          | sion fa                       | ctors                | Wind<br>  erodi-      | Wind<br>  erodi-             |
|------------------------------------|-------------------------------------------|----------------------------------------------------------|------------------------------|----------------------------------------------------------|----------------------------------------------|----------------------------------------------------|-------------------------------|-------------------------------|----------------------|-----------------------|------------------------------|
| and soil name                      | <br> <br>                                 | bulk density                                             | <br>                         | water capacity                                           | extensi-<br>bility                           | matter<br> <br>                                    | <br>  Kw                      | <br>  Kf                      | <br>  T              | bility<br>  group     | bility<br>  index            |
|                                    | ln.                                       | g/cc                                                     | In/Hr                        | In/In                                                    | Pct.                                         | Pct.                                               | ļ                             |                               | -                    | <br>                  |                              |
| 627:<br>Naptowne                   |                                           | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | 2-6                          | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br> 2.0-6.0<br> 0.5-1.5<br> 0.1-0.5    | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> 2<br> <br> <br> | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br> |
| 628:                               | <br>                                      |                                                          | <br>                         | <br>                                                     | <br>                                         | <br>                                               | <br>                          | <br>                          | <br>                 | <br>                  | <br>                         |
| Naptowne                           | 0-3<br>3-14<br>13-20<br>20-60             | 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90      | 0.6-2<br>2-6<br>2-6<br>0.6-6 | 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9      | 75-90<br>2.0-6.0<br>0.5-1.5<br>0.1-0.5             | <br>  .37<br>  .37<br>  .10   | <br>  .37<br>  .37<br>  .37   | 2<br> <br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br> <br>       |
| 629:                               |                                           | 0.07.0.40                                                |                              |                                                          | į                                            |                                                    |                               | į                             |                      |                       |                              |
| Naptowne                           | 3-14<br>  13-20                           | 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90      | 2-6<br>  2-6                 | 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9      | 75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5       | <br>  .37<br>  .37<br>  .10   | <br>  .37<br>  .37<br>  .37   | 2<br> <br> <br> <br> | 2<br> <br> <br>       | 134<br> <br> <br> <br>       |
| 630:                               |                                           | 0.07.0.10                                                |                              | <br> <br> 0.05.0.50                                      | į                                            | <br> <br>  75.00                                   |                               |                               |                      |                       | 104                          |
| Naptowne, moderately steep         | 3-14<br>  13-20                           | 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90      |                              | 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9      | 75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5       | <br>  .37<br>  .37<br>  .10   | <br>  .37<br>  .37<br>  .37   | 2<br> <br> <br>      | 2<br> <br> <br>       | 134<br> <br> <br>            |
| Naptowne, strongly sloping         | 3-14<br>13-20                             | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | 2-6<br>  2-6                 | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5 | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> 2<br> <br>      | <br>  2<br> <br>      | <br>  134<br> <br> <br>      |
| 631:<br>Naptowne, strongly sloping | <br>  0-3<br>  3-14<br>  13-20<br>  20-60 | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | 2-6<br>  2-6                 | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  2.0-6.0<br>  0.5-1.5<br>  0.1-0.5 | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> <br> 2<br> <br> | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| Naptowne, gently sloping           | 3-14<br>13-20                             | <br> 0.07-0.18<br> 0.70-1.17<br> 1.10-1.30<br> 1.40-1.90 | 2-6<br>  2-6                 | <br> 0.35-0.50<br> 0.32-0.35<br> 0.20-0.30<br> 0.05-0.25 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br> 2.0-6.0<br> 0.5-1.5<br> 0.1-0.5    | <br> <br> .37<br> .37<br> .10 | <br> <br> .37<br> .37<br> .37 | <br> 2<br> <br> <br> | <br>  2<br> <br> <br> | <br>  134<br> <br> <br>      |
| 632:<br>Niklason                   | 2-6<br>6-23                               | <br> 0.07-0.18<br> 0.80-1.20<br> 0.90-1.10<br> 1.50-1.60 | 0.6-2                        | <br> 0.35-0.50<br> 0.23-0.25<br> 0.15-0.18<br> 0.02-0.04 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  2.0-4.0<br>  0.2-2.0<br>  0.0-0.1       | <br> <br> .37<br> .37<br> .05 | <br> <br> .37<br> .37<br> .24 | <br> 2<br> <br> <br> | <br> <br>  1<br> <br> | <br> <br>  160<br> <br>      |
| 633:<br>Nikolaevsk                 | 2-20                                      | <br> 0.05-0.10<br> 0.50-0.90<br> 1.50-1.60               | 2-6                          | <br> 0.05-0.35<br> 0.30-0.35<br> 0.03-0.05               | •                                            | <br>  85-95<br>  4.0-20<br>  0.0-0.1               | •                             | <br> <br> .43<br> .24         | <br> <br> 2<br>      | <br> <br>  8<br>      | <br> <br>  0<br>             |
| 534:<br>Nikolaevsk                 | 2-20                                      | <br> 0.05-0.10<br> 0.50-0.90<br> 1.50-1.60               | 2-6                          | <br> 0.05-0.35<br> 0.30-0.35<br> 0.03-0.05               | •                                            | <br>  85-95<br>  4.0-20<br>  0.0-0.1               | •                             | <br> <br> .43<br> .24         | <br> <br> 2<br> <br> | <br> <br>  8<br>      | <br> <br>  0<br> <br>        |
| 635:<br>Nikolaevsk                 | 2-20                                      | <br> 0.05-0.10<br> 0.50-0.90<br> 1.50-1.60               | 2-6                          | <br> 0.05-0.35<br> 0.30-0.35<br> 0.03-0.05               | <br> <br> <br>  0.0-2.9<br>  0.0-2.9         | <br>  85-95<br>  4.0-20<br>  0.0-0.1               | •                             | <br> <br> .43<br> .24         | <br> <br> 2<br> <br> | <br> <br>  8<br> <br> | <br> <br>  0<br> <br>        |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                                  | <br>  Depth                | <br>  Moist                                                            | <br>  Permeability                          | <br>  Available                                                        | <br>  Linear                                         | <br>  Organic                                                  | Eros<br>              | sion fa                               | ctors                     | Wind<br>  erodi-           | Wind<br>  erodi-             |
|---------------------------------------------|----------------------------|------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|-----------------------|---------------------------------------|---------------------------|----------------------------|------------------------------|
| and soil name                               |                            | bulk<br>  density<br>                                                  | <br> <br>                                   | water capacity                                                         | extensi-<br>bility                                   | matter<br> <br>                                                | <br>  Kw              | <br>  Kf                              | <br>  T                   | bility<br>  group          | bility<br>  index            |
|                                             | ln.                        | g/cc                                                                   | In/Hr                                       | In/In                                                                  | Pct.                                                 | Pct.                                                           | <br>                  | <br>                                  | <br>                      | <br> <br>                  |                              |
| 336:<br>Nikolai                             | 2-32<br>  32-41            | <br> 0.07-0.18<br> 0.20-0.30<br> 1.20-1.60<br> 1.50-1.70               | <br>  0.6-2<br>  0.2-0.6<br>  2-6<br>  6-20 | <br> 0.35-0.50<br> 0.40-0.55<br> 0.32-0.35<br> 0.03-0.10               | <br> <br> <br>  0.0-2.9<br>  0.0-0.0                 | <br>  75-90<br>  60-85<br>  0.3-2.2<br>  0.0-0.5               | <br>  .55             | <br> <br> <br> .55<br> .24            | <br> 2<br> <br> <br>      | <br> <br>  8<br> <br> <br> | <br>  0<br> <br> <br>        |
| 337:<br>Nikolai, somewhat poorly<br>drained | 32-41                      | <br> 0.07-0.18<br> 0.20-0.30<br> 1.20-1.60<br> 1.50-1.70               |                                             | <br> 0.35-0.50<br> 0.40-0.55<br> 0.32-0.35<br> 0.03-0.10               | <br> <br> <br>  0.0-2.9<br>  0.0-0.0                 | 75-90<br>60-85<br>0.3-2.2                                      | •                     | <br> <br> <br> .55<br> .24            | <br> 2<br> <br>           | <br>  8<br> <br>           | <br>  0<br> <br>             |
| Tuxedni                                     | 2-24<br>24-36              | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.80<br> 1.20-1.30               | 2-6                                         | <br> 0.35-0.50<br> 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9         | <br>  75-90<br> 6.0-10<br> 0.2-2.0<br> 0.2-2.0                 | .24<br>.43            | <br> <br> .24<br> .49<br> .32         | <br> 2<br> <br> <br>      | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br>      |
| 538:<br>Puntilla                            | 6-10<br>10-36              | <br> 0.05-0.10<br> 0.70-0.80<br> 0.50-0.70<br> 1.60-1.70               | <br>  6-20<br>  2-6<br>  2-6<br>  0.2-0.6   | <br> 0.05-0.35<br> 0.25-0.27<br> 0.25-0.27<br> 0.20-0.23               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9         | <br>  85-95<br>  4.0-10<br>  2.0-15<br>  0.2-0.5               | .43                   | <br> <br> .37<br> .43<br> .49         | <br>  2<br> <br> <br>     | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br>      |
| 639:<br>Puntilla                            | 6-10<br>10-36              | <br> 0.05-0.10<br> 0.70-0.80<br> 0.50-0.70<br> 1.60-1.70               | <br>  6-20<br>  2-6<br>  2-6<br>  0.2-0.6   | <br> 0.05-0.35<br> 0.25-0.27<br> 0.25-0.27<br> 0.20-0.23               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9         | <br>  85-95<br>  4.0-10<br>  2.0-15<br>  0.2-0.5               | .43                   | <br> <br> .37<br> .43<br> .49         | <br> 2<br> <br> <br>      | <br> <br>  2<br> <br> <br> | <br>  134<br> <br> <br>      |
| 640:<br>Qutal                               | 3-10<br>  10-24<br>  24-48 | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.70<br> 1.30-1.80 | 0.6-2<br>2-6<br>2-6<br>0.7-2<br>6-20        | <br> 0.35-0.50<br> 0.25-0.30<br> 0.25-0.30<br> 0.20-0.35<br> 0.02-0.06 | <br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  2.0-8.0<br>  0.2-2.0<br>  0.1-1.0       | .37<br>  .43<br>  .32 | <br> <br> .37<br> .43<br> .55<br> .20 | <br> 3<br> <br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br> <br> |
| 641:<br>Qutal                               | 3-10<br>  10-24<br>  24-48 | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.70<br> 1.30-1.80 | 2-6<br>  2-6                                | <br> 0.35-0.50<br> 0.25-0.30<br> 0.25-0.30<br> 0.20-0.35<br> 0.02-0.06 | 3.0-5.9                                              | <br>  75-90<br>  4.0-10<br>  2.0-8.0<br>  0.2-2.0<br>  0.1-1.0 | .43                   | <br> <br> .37<br> .43<br> .55<br> .20 | <br> 3<br> <br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br> <br> |
| 642:<br>Qutal                               | 24-48                      | <br> 0.07-0.18<br> 0.60-0.70<br> 0.60-0.70<br> 1.20-1.70<br> 1.30-1.80 | 0.6-2<br>2-6<br>2-6<br>0.7-2<br>6-20        | <br> 0.35-0.50<br> 0.25-0.30<br> 0.25-0.30<br> 0.20-0.35<br> 0.02-0.06 | <br>  0.0-2.9<br>  0.0-2.9<br>  3.0-5.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  2.0-8.0<br>  0.2-2.0<br>  0.1-1.0       | :                     | <br> <br> .37<br> .43<br> .55<br> .20 | <br> 3<br> <br> <br> <br> | <br>  2<br> <br> <br>      | <br>  134<br> <br> <br> <br> |
| 643:<br>Redoubt, terraces                   | 2-22                       | <br> 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85                             | <br>  0.7-2<br>  2-6<br>  0.7-2             | <br> 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13                             | <br> <br> <br>  0.0-2.9<br>  0.0-2.9                 | <br> <br>  75-90<br>  4.0-20<br>  0.2-2.0                      | !                     | <br> <br> .43<br> .43                 | <br> <br> 2<br> <br>      | <br> <br>  2<br>           | <br> <br>  134<br> <br>      |
| 644:<br>Redoubt                             | 0-2<br>  2-22<br>  22-60   | <br> 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85                             | <br>  0.7-2<br>  2-6<br>  0.7-2             | <br> 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13                             | <br> <br>  0.0-2.9<br>  0.0-2.9                      | <br>  75-90<br>  4.0-20<br>  0.2-2.0                           | !                     | <br> <br> .43<br> .43                 | <br> <br> 2<br>           | <br> <br>  2<br>           | <br> <br>  134<br>           |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                | <br>  Depth               | Moist                                 | <br>  Permeability        |                                       | •                             | <br>  Organic                  | Eros          | sion ta               | ctors           | Wind<br>  erodi-      | Wind                  |
|---------------------------|---------------------------|---------------------------------------|---------------------------|---------------------------------------|-------------------------------|--------------------------------|---------------|-----------------------|-----------------|-----------------------|-----------------------|
| and soil name             | <br> <br>                 | bulk<br> density<br>                  | <br> <br>                 | water capacity                        | extensi-<br>bility            | matter<br> <br>                | <br>  Kw<br>  | <br>  Kf<br>          | <br>  T<br>     | bility<br>  group<br> | bility<br>  index<br> |
|                           | ln.                       | g/cc                                  | I                         | <br>  In/In                           | Pct.                          | Pct.                           | !<br>!        |                       | ļ               | <u> </u>              | ļ                     |
| 345:                      |                           |                                       |                           |                                       |                               |                                | <br>          | ļ                     | ļ               |                       |                       |
| Redoubt                   | 2-22                      | 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85 | 0.7-2<br>2-6<br>0.7-2     | 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13 | <br>  0.0-2.9<br>  0.0-2.9    | 75-90<br>4.0-20<br>0.2-2.0     | .43           | <br>  .43<br>  .43    | <br> 2<br>      | <br>  2<br>           | <br>  134<br> <br>    |
| 46:                       |                           | <br>                                  | <br>                      | <br>                                  | <br>                          | <br>                           | <br>          | l<br>I                | l<br>I          | <br>                  | <br>                  |
| Redoubt, cool             | 2-22                      | 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85 | •                         | 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13 | 0.0-2.9                       | 75-90<br>4.0-20<br>0.2-2.0     | .43           | <br>  .43<br>  .43    | 2<br> <br>      | <br>  2<br> <br>      | 134<br> <br>          |
| 47:                       |                           |                                       |                           | İ                                     |                               | j                              |               |                       |                 |                       |                       |
| Redoubt, moderately steep | 2-22                      | 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85 |                           | 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13 | <br>  0.0-2.9<br>  0.0-2.9    | 75-90<br>  4.0-20<br>  0.2-2.0 | .43           | <br>  .43<br>  .43    | 2<br> <br>      | 2<br> <br>            | 134<br> <br>          |
| Redoubt, gently sloping   | <br>  0-2                 | <br> 0.07-0.18                        | <br>  0.7 <b>-</b> 2      | <br> 0.35-0.50                        | <br>                          | <br>  75-90                    | <br>          | <br>                  | <br> 2          | <br>  2               | <br>  134             |
| 70 7 7                    | 2-22                      | 0.50-0.90                             | 2-6<br>0.7-2              | 0.30-0.35                             | 0.0-2.9                       | 4.0-20<br>0.2-2.0              | •             | .43<br>  .43          | <u> </u><br>    | <br> <br>             | <br>                  |
| 48:                       | <br>                      |                                       | <br>                      | <br>                                  | <br>                          |                                | <br>          |                       |                 | !<br>                 |                       |
| Redoubt, cool             | 2-22                      | 0.07-0.18<br> 0.50-0.90<br> 1.40-1.85 | 0.7-2<br>  2-6<br>  0.7-2 | 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13 | <br>  0.0-2.9<br>  0.0-2.9    | 75-90<br>  4.0-20<br>  0.2-2.0 | .43           | <br>  .43<br>  .43    | 2<br> <br>      | 2<br> <br>            | 134<br> <br>          |
| Tuxedni                   | <br>  0-2                 | <br> 0.07-0.18                        | <br>  0.6 <b>-</b> 2      | <br> 0.35-0.50                        | <br>                          | <br>  75-90                    | <br>          | <br>                  | <br> 2          | <br>  2               | <br>  134             |
|                           | 2-24<br>24-36             | 0.60-0.70<br> 1.20-1.80<br> 1.20-1.30 | 2-6<br>0.7-2<br>2-6       | 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13 | 0.0-2.9<br>0.0-2.9<br>0.0-2.9 | 6.0-10<br>0.2-2.0<br>0.2-2.0   | .24<br>.43    | .24<br>  .49<br>  .32 | -<br> <br> <br> | <br> <br>             |                       |
| 49:<br>Riverwash          | <br> <br>                 | <br> <br>                             | <br> <br>                 | <br> <br>                             | <br> <br>                     | <br> <br>                      | <br> <br>     | <br> <br>             | <br> <br> -     | <br> <br>             | <br> <br>             |
| 50:                       | İ                         | į                                     | į                         | į                                     | į                             | į                              | İ             | İ                     | į               | ĺ                     | į                     |
| Salamatof                 | <br>  0-4<br>  4-60       | 0.05-0.10<br>0.05-0.10                | 6-20<br>  6-20            | 0.25-0.30<br>0.25-0.30                | <br> <br>                     | <br>  80-99<br>  80-99         | <br> <br>     | <br> <br>             | 5               | <br>  8<br>           | 0                     |
| Doroshin                  |                           | <br> 0.07-0.18<br> 1.30-1.40          | <br>  0.6-2<br>  0.7-2    | <br> 0.35-0.50<br> 0.18-0.22          | <br> <br> 0.0-2.9             | <br>  75-90<br>  0.3-2.2       | <br> <br> .43 | <br> <br> .43         | <br> 2<br>      | <br>  8<br>           | 0                     |
| 51:                       | <br>                      |                                       | <br>                      | <br>                                  | <br>                          | <br>                           | <br>          |                       | l<br>I          | <br>                  |                       |
| Salamatof                 |                           | 0.05-0.10<br> 0.05-0.10               | 6-20<br>6-20              | 0.25-0.30                             | <br> <br>                     | 80-99<br>  80-99               | <br> <br>     | <br>                  | 5               | <br>  8<br>           | 0                     |
| 52:                       |                           |                                       |                           | į                                     | į                             | į                              | į             | ļ                     | ļ               |                       | į                     |
| Slikok                    |                           | 0.20-0.30<br> 0.40-0.60<br> 1.50-1.80 | •                         | 0.40-0.55<br> 0.28-0.30<br> 0.25-0.27 | <br>  0.0-2.9<br>  0.0-2.9    | 60-85<br>  8.0-20<br>  0.2-2.0 | •             | <br>  .37<br>  .64    | 2<br> <br>      | 8<br> <br>            | 0<br> <br>            |
| 53:                       |                           |                                       |                           |                                       |                               |                                | <br>          |                       |                 | <br>                  |                       |
| 53:<br>Slikok             | <br>  0-13                | 0.20-0.30                             | <br> 0.001-0.06           | <br> 0.40-0.55                        | <br>                          | <br>  60-85                    | <br>          | <br>                  | <br> 2          | <br>  8               | 0                     |
|                           | 13-51<br>  51-60          | 0.40-0.60                             | 2-6<br>0.2-0.6            | 0.28-0.30                             | 0.0-2.9                       | 8.0-20<br>0.2-2.0              | .28<br>  .28  | .37<br>  .64          |                 | <br> <br>             |                       |
| 54:                       |                           |                                       |                           |                                       |                               |                                |               |                       |                 |                       |                       |
| Smithfha                  | 0-3<br>  3-4              | 0.07-0.18<br> 0.90-1.30               | 2-6<br>  2-6              | 0.32-0.35<br> 0.10-0.15               | <br>  0 0-2 9                 | 40-70<br>  2.0-8.0             | <br>  .32     | <br>  .32             | 5<br>           | 2<br>                 | 134                   |
|                           | 3 <del>-4</del><br>  4-18 | 0.90-1.30                             | 2-6                       | 0.10-0.15                             | 0.0-2.9                       | 5.0-10                         | •             | .32                   |                 | <br>                  |                       |
|                           | 18-60                     | 0.90-1.30                             | 2-6                       | 0.10-0.15                             | 0.0-2.9                       | 0.5-1.5                        | .32           | .32                   | į               | ļ                     | į                     |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                         | Depth                                              | Moist                                                                  | <br>  Permeability    | •                                                                      |                                                           | <br>  Organic                                                  | Eros<br>                      | ion fa                                | ctors                      | Wind<br>  erodi-      | Wind<br>  erodi                   |
|------------------------------------|----------------------------------------------------|------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------|-------------------------------|---------------------------------------|----------------------------|-----------------------|-----------------------------------|
| and soil name                      | <br> <br>                                          | bulk<br> density<br>                                                   | <br> <br>             | water capacity                                                         | extensi-<br>bility                                        | matter<br> <br>                                                | <br>  Kw<br>                  | <br>  Kf<br>                          | <br>  T<br>                | bility<br>  group<br> | bility<br>  index<br>             |
|                                    | ln.                                                | g/cc                                                                   | I                     | <br>  In/In                                                            | Pct.                                                      | Pct.                                                           | <br>                          |                                       |                            | <br>                  |                                   |
| 555:<br>Smithfha                   | <br> <br>  0-3<br>  3-4<br>  4-18<br>  18-60       | <br> 0.07-0.18<br> 0.90-1.30<br> 0.90-1.30<br> 0.90-1.30               | 2-6<br>2-6            | <br> 0.32-0.35<br> 0.10-0.15<br> 0.10-0.15<br> 0.10-0.15               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9              | <br>  40-70<br>  2.0-8.0<br>  5.0-10<br>  0.5-1.5              | <br> <br> .32<br> .32<br> .32 | <br> <br> .32<br> .32<br> .32         | <br> <br>  5<br> <br> <br> | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br>      |
| 656:<br>Smokey Bay                 | 2-9<br>9-55                                        | <br> 0.20-0.30<br> 1.10-1.20<br> 1.20-1.40<br> 1.20-1.50               | 0.7-2<br>0.7-2        | <br> 0.40-0.55<br> 0.21-0.24<br> 0.22-0.25<br> 0.18-0.22               |                                                           | <br>  60-85<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0              | <br> <br> .28<br> .28<br> .28 | <br> <br> .37<br> .37<br> .37         | <br> -<br> 5<br> -<br> -   | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br>      |
| 957:<br>Smokey Bay                 | 2-9<br>9-55                                        | <br> 0.20-0.30<br> 1.10-1.20<br> 1.20-1.40<br> 1.20-1.50               | 0.7-2<br>0.7-2        | <br> 0.40-0.55<br> 0.21-0.24<br> 0.22-0.25<br> 0.18-0.22               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9              | <br>  60-85<br>  4.0-10<br>  0.2-1.0<br>  0.2-2.0              | <br> <br> .28<br> .28<br> .28 | <br> <br> .37<br> .37<br> .37         | <br> <br> 5<br> <br> <br>  | <br> <br>  2<br> <br> | <br>  134<br> <br> <br>           |
| 658:<br>Snowdance                  | 3-8<br>  8-24                                      | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80               | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.32-0.34<br> 0.32-0.34<br> 0.06-0.08               | 0.0-2.9                                                   | <br>  85-95<br>  6.0-20<br>  2.0-8.0<br>  0.2-2.0              | .43                           | <br> <br> .43<br> .49<br> .15         | <br> 2<br> <br> <br>       | <br> <br>  8<br> <br> | <br>  0<br> <br> <br>             |
| 659:<br>Soldotna                   | 4-7<br>  7-22<br>  22-29                           | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>2-6<br>2-6     | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9      | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6                    | .43<br>.55                    | <br> <br> .43<br> .43<br> .49<br> .10 | <br> 2<br> <br> <br>       | <br>  2<br> <br>      | <br>  134<br> <br> <br> <br>      |
| 660:<br>Soldotna                   | 4-7<br>  7-22<br>  22-29                           | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>2-6<br>2-6     | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | 0.0-2.9                                                   | <br>  75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | •                             |                                       | <br> 2<br> <br> <br> <br>  | <br>  2<br> <br> <br> | <br> <br>  134<br> <br> <br>      |
| 661:<br>Soldotna                   | 4-7                                                | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>2-6            | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | 0.0-2.9                                                   |                                                                | .43<br>  .43<br>  .55         | .43                                   | <br> 2<br> <br> <br> <br>  | <br>  2<br> <br> <br> | <br>  134<br> <br> <br> <br>      |
| 662:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6<br>  2-6 | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9              | <br>  75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | .55                           | <br> <br> .43<br> .43<br> .49<br> .10 | <br> 2<br> <br> <br>       | <br>  2<br> <br> <br> | <br> <br>  134<br> <br> <br>      |
| 663:<br>Soldotna, sandy substratum | 4-7<br>  7-22<br>  22-29                           | <br> 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>2-6<br>2-6     | <br> 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | .55                           | <br> <br> .43<br> .43<br> .49<br> .10 | <br> 2<br> <br> <br> <br>  | <br>  2<br> <br> <br> | <br>  134<br> <br> <br> <br> <br> |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                 | <br>  Depth                                  | <br>  Moist                                                       | <br>  Permeability    | •                                                                 | •                                                    | <br>  Organic                                            | Eros                                 | ion fa                               | ctors                     | Wind<br>  erodi-      | Wind<br>  erodi              |
|----------------------------|----------------------------------------------|-------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|--------------------------------------|--------------------------------------|---------------------------|-----------------------|------------------------------|
| and soil name              | <br> <br>                                    | bulk<br> density                                                  | <br> <br>             | water capacity                                                    | extensi-<br>bility                                   | matter<br> <br>                                          | <br>  Kw<br>                         | <br>  Kf<br>                         | <br>  T<br>               | bility<br>  group     | bility<br>  index            |
|                            | ln.                                          | g/cc                                                              | <br>  In/Hr           | In/In                                                             | Pct.                                                 | Pct.                                                     | <br>                                 |                                      |                           | <br>                  |                              |
| 664:                       |                                              |                                                                   |                       |                                                                   |                                                      |                                                          |                                      |                                      |                           |                       |                              |
| Soldotna, sandy substratum | 0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6<br>  2-6 | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | <br> 2<br> <br> <br>      | <br>  2<br> <br> <br> | <br>  134<br> <br> <br> <br> |
| 665:                       | <br>                                         |                                                                   | <br>                  | <br>                                                              | <br>                                                 | <br>                                                     | <br>                                 |                                      |                           | <br>                  | <br>                         |
| Soldotna, sandy substratum | 0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6<br>  2-6 | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9     | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | 2<br> <br> <br> <br>      | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br> <br>  |
| 666:                       |                                              |                                                                   |                       |                                                                   |                                                      |                                                          |                                      |                                      |                           |                       |                              |
| Soldotna, sandy substratum | 0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6                   | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | 2<br> <br> <br> <br> <br> | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br> <br>  |
| 667:                       |                                              | 0.07.0.10                                                         | . 070                 | 0.05.0.50                                                         | į                                                    | 75.00                                                    | į                                    | į                                    |                           | į                     |                              |
| Soldotna, strongly sloping | 4-7<br>  7-22<br>  22-29                     | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6          | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | 2<br> <br> <br> <br>      | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br>       |
| Soldotna, gently sloping   | <br>  0-4                                    | 0.07-0.18                                                         | <br>  0.7-2           | <br> 0.35-0.50                                                    | <br>                                                 | <br>  75-90                                              | <br>                                 | <br>                                 | <br>  2                   | <br>  2               | <br>  134                    |
| conduita, gently stoping   | 4-7<br>  7-22<br>  22-29<br>  29-60          | 0.80-0.90<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6<br>  2-6 | 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.02-0.04               | 0.0-2.9<br>0.0-2.9<br>0.0-2.9<br>0.0-2.9             | 4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6            | .43<br>  .43<br>  .55<br>  .10       | .43<br>  .43<br>  .49<br>  .10       | <b>-</b><br> <br> <br>    |                       | 104<br> <br> <br> <br>       |
| 668:                       | <br>                                         | <br>                                                              | <br>                  | <br>                                                              | <br>                                                 | <br>                                                     | <br>                                 | <br>                                 |                           | <br>                  | <br>                         |
| Soldotna, sandy substratum | 4-7<br>  7-22<br>  22-29                     | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6          | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9     | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | 2<br> <br> <br> <br>      | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br>       |
| Kenai                      | <br>-  0-2                                   | <br> 0.07-0.18                                                    | <br>  0.7-2           | <br> 0.35-0.50                                                    | <br>                                                 | <br>  75-90                                              | <br>                                 | <br>                                 | <br> 3                    | <br>  2               | <br>  134                    |
|                            |                                              | 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80               | 2-6<br>2-6<br>2-6     | 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27               | 0.0-2.9<br>0.0-2.9<br>0.0-2.9<br>3.0-5.9             | 2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0             | .37<br>  .43<br>  .43<br>  .43       | .37<br>  .43<br>  .49<br>  .49       | <br> <br> <br> <br>       | <br> <br> <br>        | <br> <br> <br> <br>          |
| 669:                       |                                              |                                                                   | <br>                  | <br>                                                              | !<br>                                                | !<br>                                                    | <br>                                 | <br>                                 |                           | <br>                  | <br>                         |
| Soldotna, sandy substratum | 0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | 0.07-0.18<br> 0.80-0.90<br> 0.80-0.90<br> 0.90-1.20<br> 1.40-1.60 | 2-6<br>  2-6<br>  2-6 | 0.35-0.50<br> 0.33-0.35<br> 0.33-0.35<br> 0.30-0.33<br> 0.04-0.08 | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | 75-90<br>  4.0-10<br>  1.0-6.0<br>  0.1-0.6<br>  0.1-0.6 | <br>  .43<br>  .43<br>  .55<br>  .10 | <br>  .43<br>  .43<br>  .49<br>  .10 | 2<br> <br> <br> <br>      | 2<br> <br> <br> <br>  | 134<br> <br> <br> <br>       |
| Kenai                      | <br>-  0-2                                   | <br> 0.07-0.18                                                    | <br>  0.7 <b>-</b> 2  | <br> 0.35-0.50                                                    | <br>                                                 | <br>  75-90                                              | <br>                                 | <br>                                 | <br> 3                    | <br>  2               | <br>  134                    |
| -                          | 2-6<br>  6-19<br>  19-24<br>  25-60          | 0.70-0.80<br> 0.70-1.10<br> 1.20-1.80<br> 1.50-1.80               | 2-6<br>  2-6<br>  2-6 | 0.33-0.35<br> 0.33-0.35<br> 0.33-0.35<br> 0.25-0.27               | 0.0-2.9<br>0.0-2.9<br>0.0-2.9<br>3.0-5.9             | 2.0-10<br>  4.0-10<br>  0.3-1.5<br>  0.2-1.0             | .37<br>  .43<br>  .43<br>  .43       | .37<br>  .43<br>  .49<br>  .49       | <br> <br> <br>            | <br> <br> <br>        | <br> <br> <br>               |

Table 10. Physical Properties of the Soils—Continued

| Map symbol      | <br>  Depth      | <br>  Moist             | <br>  Permeability            |                         | •                  | <br>  Organic        | Eros                 | ion fa       | ctors       | Wind<br>  erodi-      | Wind<br>  erodi   |
|-----------------|------------------|-------------------------|-------------------------------|-------------------------|--------------------|----------------------|----------------------|--------------|-------------|-----------------------|-------------------|
| and soil name   |                  | bulk<br>  density<br>   | <br> <br>                     | water capacity          | extensi-<br>bility | matter<br> <br>      | <br>  Kw<br>         | <br>  Kf<br> | <br>  T<br> | bility<br>  group<br> | bility<br>  index |
|                 | In.              | g/cc                    | In/Hr                         | In/In                   | Pct.               | Pct.                 |                      |              |             |                       |                   |
| 670:            | l<br>I           |                         | <br>                          | <br>                    | <br>               | <br>                 | <br>                 |              |             | <br>                  | <br>              |
| Soldotna        |                  | 0.07-0.18               |                               | 0.35-0.50               |                    | 75-90                | <br>                 | <br>         | 2           | 2                     | 134               |
|                 | 4-7              | 0.80-0.90               |                               | 0.33-0.35               |                    | 4.0-10               | .43                  | .43          |             |                       | ļ                 |
|                 | 7-22<br>  22-29  | 0.80-0.90               | 2-6<br>  2-6                  | 0.33-0.35<br> 0.30-0.33 | 0.0-2.9            | 1.0-6.0<br>  0.1-0.6 | .43<br>  .55         | .43<br>  .49 | l           | <br>                  |                   |
|                 | 29-60            | 1.40-1.60               | 6-20                          | 0.02-0.04               |                    | 0.1-0.6              | 1.10                 | 1.10         | İ           | <br>                  | İ                 |
| Kichatna        | <br>  0-2        | <br> 0.07-0.18          | <br>  2-6                     | <br> 0.32-0.35          | <br>               | <br>  40-70          | <br>                 | <br>         | <br> 1      | <br>  2               | <br>  134         |
| Nonana          | 2-4              | 0.65-0.90               | 0.6-2                         | 0.31-0.37               | 0.0-2.9            | 2.0-8.0              | .37                  | .37          | ¦           | -                     | 104               |
|                 | 4-11             | 0.65-0.90               | 0.6-2                         | 0.31-0.37               |                    | 4.0-10               | .37                  | .37          | İ           | j                     | İ                 |
|                 |                  | 1.50-1.60<br> 1.50-1.80 | 2-6<br>  6-20                 | 0.04-0.08<br> 0.03-0.05 |                    | 2.0-6.0              | .10<br>  .05         | .24<br>  .24 |             | <br>                  |                   |
|                 |                  |                         | 020                           |                         |                    | 0.0 0.5              | .03                  | .24          |             | <br>                  |                   |
| 71:<br>Soldotna | <br>  0-4        | <br> 0.07-0.18          | 0.7-2                         | <br> 0.35-0.50          | <br>               | <br>  75-90          | <br>                 | <br>         | <br>  2     | <br>  2               | <br>  134         |
|                 | 4-7              | 0.80-0.90               | 2-6                           | 0.33-0.35               | 0.0-2.9            | 4.0-10               | .43                  | .43          | i -         | =                     |                   |
|                 | 7-22             | 0.80-0.90               | 2-6                           | 0.33-0.35               | 0.0-2.9            | 1.0-6.0              | .43                  | .43          |             |                       |                   |
|                 | 22-29<br>  29-60 | 0.90-1.20<br> 1.40-1.60 |                               | 0.30-0.33<br> 0.02-0.04 |                    | 0.1-0.6<br>  0.1-0.6 | .55<br>  .10         | .49<br> .10  | <br>        | <br>                  | <br>              |
| Kichatna        | i                | 0.07-0.18               | İ                             | İ                       | j                  | j                    | İ                    | İ            | į,          |                       |                   |
| Nichatha        | 0-2<br>  2-4     | 0.07-0.18               | 2-6<br>  0.6-2                | 0.32-0.35<br> 0.31-0.37 | <br> 00-29         | 40-70<br>  2.0-8.0   | <br>  .37            | <br>  .37    | 1<br>       | 2<br>                 | 134               |
|                 | 4-11             | 0.65-0.90               |                               | 0.31-0.37               |                    | 4.0-10               | .37                  | .37          | i           | !<br>                 | ľ                 |
|                 |                  | 1.50-1.60               | 2-6                           | 0.04-0.08               |                    | 2.0-6.0              | .10                  | .24          | į           |                       | ļ                 |
|                 | 14-60            | 1.50-1.80<br>           | 6-20<br>                      | 0.03-0.05<br>           | 0.0-2.9<br>        | 0.3-0.9<br>          | .05<br>              | .24<br>      | <br>        |                       | <br>              |
| 72:<br>Soldotna | <br>  0-4        | <br> 0.07-0.18          | j<br>  0.7-2                  | 0.35-0.50               | <br>               | j<br>  75-90         | <br>                 | <br>         | <br>  2     | <br>  2               | <br>  134         |
| 30100tila       | 4-7              | 0.80-0.90               | 2-6                           | 0.33-0.35               | 1                  | 4.0-10               | .43                  | .43          | -           | <del>-</del><br>      | 134               |
|                 | 7-22             | 0.80-0.90               | 2-6                           | 0.33-0.35               | 0.0-2.9            | 1.0-6.0              | .43                  | .43          | j           | İ                     | j                 |
|                 | 22-29            | 0.90-1.20               |                               | 0.30-0.33               |                    | 0.1-0.6              | .55                  | .49          | !           | ļ                     |                   |
|                 | İ                | 1.40-1.60               | 6-20<br>                      | 0.02-0.04<br>           | 0.0-2.9<br>        | 0.1-0.6<br>          | .10<br>              | .10<br>      | <br>        |                       | <br>              |
| Nikolai         | 0-2<br>  2-32    | 0.07-0.18               | 0.6-2                         | 0.35-0.50               | j<br>j             | 75-90<br>60-85       | <br>                 | <br>         | 2           | 8                     | 0                 |
|                 |                  | 0.20-0.30<br> 1.20-1.60 | 0.2 <del>-</del> 0.6<br>  2-6 | 0.32-0.35               | 1                  | 60-65<br>  0.3-2.2   | <del></del><br>  .55 | <br>  .55    | <br>        | l<br>I                | <br>              |
|                 |                  | 1.50-1.70               | 6-20                          | 0.03-0.10               |                    | 0.0-0.5              | •                    | .24          | į           |                       | ļ                 |
| 73:             |                  |                         | <br>                          | <br>                    | <br>               | <br>                 | <br>                 | <br>         | <br>        | <br>                  | <br>              |
| Spenard         |                  | 0.05-0.10               |                               | 0.05-0.35               |                    | 85-95                |                      |              | 2           | 8                     | 0                 |
|                 |                  | 0.60-0.90               |                               | 0.25-0.30               |                    |                      | ! -                  | .37          |             |                       |                   |
|                 |                  | 0.60-0.90<br> 1.20-1.70 |                               | 0.25-0.30<br> 0.15-0.20 |                    | 0.1-0.5              | !                    | .43<br>  .55 |             | <br>                  |                   |
| 74:             | İ                |                         |                               |                         |                    |                      |                      |              |             | j<br>i                |                   |
| 74.<br>Spenard  | 0-9              | 0.05-0.10               |                               | 0.05-0.35               | <br>               | <br>  85-95          | <br>                 | <br>         | 2           | <br>  8               | 0                 |
|                 | 9-14             | 0.60-0.90               |                               | 0.25-0.30               |                    | 6.0-10               | .37                  | .37          |             |                       | ļ                 |
|                 |                  | 0.60-0.90<br> 1.20-1.70 | 2-6<br>  0.7-2                | 0.25-0.30<br> 0.15-0.20 |                    | 2.0-8.0<br>0.1-0.5   | .43<br>  .43         | .43<br>  .55 | <br>        | <br>                  | <br>              |
| 75.             |                  |                         |                               |                         |                    |                      | -                    | -            | į           | İ                     | İ                 |
| 75:<br>Spenard  | 0-9              | <br> 0.05-0.10          | <br>  6-20                    | <br> 0.05-0.35          | <br>               | <br>  85-95          | <br>                 | <br>         | <br> 2      | <br>  8               | <br>  0           |
|                 | 9-14             | 0.60-0.90               | 2-6                           | 0.25-0.30               | 0.0-2.9            | 6.0-10               | .37                  | .37          | İ           | j                     | j                 |
|                 |                  | 0.60-0.90               | 2-6                           | 0.25-0.30               |                    | 2.0-8.0              | .43                  | .43          |             |                       |                   |
|                 | 25-60            | 1.20-1.70               | 0.7-2                         | 0.15-0.20               | 3.0-5.9            | 0.1-0.5              | .43                  | .55          |             | <br>                  |                   |

Table 10. Physical Properties of the Soils—Continued

| Map symbol           | <br>  Depth      | <br>  Moist             | <br>  Permeability  | <br>  Available         | <br>  Linear       | <br>  Organic        | Eros          | sion fa          | ctors       | Wind<br>  erodi-      | Wind<br>  erodi       |
|----------------------|------------------|-------------------------|---------------------|-------------------------|--------------------|----------------------|---------------|------------------|-------------|-----------------------|-----------------------|
| and soil name        |                  | bulk<br>  density<br>   | <br> <br>           | water<br>  capacity<br> | extensi-<br>bility | matter<br> <br>      | <br>  Kw<br>  | <br>  Kf<br>     | <br>  T<br> | bility<br>  group<br> | bility<br>  index<br> |
|                      | In.              | g/cc                    | In/Hr               | In/In                   | Pct.               | Pct.                 | ļ             |                  | ļ           | <u> </u>              |                       |
| 676:                 |                  | <br>                    | <br>                | <br>                    | <br>               | <br>                 | l<br>I        | l<br>I           | l<br>I      | <br>                  | <br>                  |
| Starichkof           | 0-7<br>  7-60    | 0.05-0.10               | 6-20<br>0.7-2       | 0.05-0.35               | <br>               | 85-95<br>75-90       | <br>          |                  | 5           | 8<br>                 | 0                     |
| Doroshin             |                  | 0.07-0.18               | 0.6-2               | 0.35-0.50<br>0.18-0.22  | <br> <br>  0.0-2.9 | 75-90<br>0.3-2.2     | <br> <br> .43 |                  | 2           | <br>  8<br>           | 0                     |
| 677:                 |                  |                         | <br>                | <br>                    | <br>               | <br>                 | <br>          | <br>             | <br>        | <br>                  | <br>                  |
| Starichkof           | 0-7<br>  7-60    | 0.05-0.10<br> 0.07-0.18 | 6-20<br>  0.7-2     | 0.05-0.35<br> 0.35-0.50 | <br>               | 85-95<br>  75-90     | <br>          | <br>             | 5<br>       | 8<br> <br>            | 0<br>                 |
| 678:                 |                  |                         |                     |                         | į                  | į                    |               |                  | ļ           |                       |                       |
| Starichkof           | 0-7<br>  7-60    | 0.05-0.10<br> 0.07-0.18 | 6-20<br>  0.7-2<br> | 0.05-0.35<br> 0.35-0.50 | <br> <br>          | 85-95<br>  75-90<br> | <br> <br>     | <br>             | 5<br> <br>  | 8<br> <br>            | 0<br> <br>            |
| 679:                 |                  |                         |                     |                         | į                  |                      |               |                  | <u> </u>    |                       |                       |
| Starichkof, forested | 0-7<br>  7-60    | 0.05-0.10<br>0.07-0.18  |                     | 0.05-0.35<br> 0.35-0.50 | <br>               | 85-95<br>  75-90     | <br> <br>     | <br>             | 5<br>       | 8<br> <br>            | 0<br> <br>            |
| 680:                 |                  |                         |                     |                         | į                  |                      |               |                  | ļ_          |                       |                       |
| Starichkof           | 0-7<br>  7-60    | 0.05-0.10               | 6-20<br>  0.7-2     | 0.05-0.35               | <br>               | 85-95<br>  75-90     | <br>          | <br>             | 5<br>       | 8<br>                 | 0<br>                 |
| Slikok               | 0-13             | 0.20-0.30               | 0.001-0.06          | <br> 0.40-0.55          | <br>               | <br>  60-85          | <br>          | <br>             | <br> 2      | <br>  8               | 0                     |
|                      | 13-51<br>  51-60 | 0.40-0.60<br> 1.50-1.80 | 2-6<br>0.2-0.6      | 0.28-0.30               | 0.0-2.9            | 8.0-20<br>0.2-2.0    | .28<br>.28    | .37<br>.64       |             | <br>                  | <br>                  |
| Naptowne             | <br>  0-3        | <br> 0.07-0.18          | <br>  0.6-2         | <br> 0.35-0.50          | <br>               | <br>  75-90          | <br>          | <br>             | <br> 2      | <br>  2               | <br>  134             |
| •                    | 3-14             | 0.70-1.17               | 2-6                 | 0.32-0.35               | 0.0-2.9            | 2.0-6.0              | .37           | .37              | į           | į                     | į                     |
|                      |                  | 1.10-1.30<br> 1.40-1.90 | 2-6<br>  0.6-6      | 0.20-0.30               | 0.0-2.9            | 0.5-1.5              | •             | .37<br>  .37     | <br>        | <br>                  | <br>                  |
| 581:                 |                  |                         | <br>                | <br>                    | <br>               | <br>                 | <br>          | <br>             | <br>        | <br>                  | <br>                  |
| Starichkof           | 0-7<br>  7-60    | 0.05-0.10               | 6-20<br>0.7-2       | 0.05-0.35               | <br>               | 85-95<br>  75-90     | <br>          | <br>             | 5           | 8<br>                 | [ 0<br>               |
| Spenard              | 0-9              | 0.05-0.10               | <br>  6-20          | <br> 0.05-0.35          | <br>               | <br>  85-95          | <br>          | <br>             | <br> 2      | <br>  8               | 0                     |
|                      | 9-14<br>  14-25  | 0.60-0.90<br> 0.60-0.90 | 2-6<br>  2-6        | 0.25-0.30<br> 0.25-0.30 | 0.0-2.9            | 6.0-10<br>  2.0-8.0  | 37            | .37<br>  .43     |             |                       |                       |
|                      |                  | 1.20-1.70<br>           | 0.7-2               |                         | 3.0-5.9            | 0.1-0.5              | •             | .43<br>  .55<br> | <br> <br>   | <br> <br>             | <br> <br>             |
| 682:                 |                  |                         |                     |                         | į                  |                      |               |                  |             |                       |                       |
| Susitna              | 0-2<br>  2-3     | 0.07-0.18<br>0.80-0.90  | 0.7-2<br>0.7-2      | 0.35-0.50<br>0.19-0.23  | <br>  0.0-2.9      | 75-90<br>  2.0-5.0   | <br>  .37     | <br>  .37        | 3<br>       | 2<br>                 | 134<br>               |
|                      | 3-45             | 0.90-1.00               | 0.7-2               | 0.15-0.17               | 0.0-2.9            | 0.0-2.0              | .32           | .37              | ļ           |                       | į                     |
|                      | i                | 1.50-1.60<br>           | 6-20<br>            | 0.02-0.04<br>           | 0.0-2.9<br>        | 0.0-0.5<br>          | .05<br>       | .20<br>          | <br>        | <br>                  | <br>                  |
| Riverwash            |                  | j                       | j                   | j                       | j<br>i             | j<br>i               | ļ             | <br> <br>        | -<br>       | j<br>i                | <br>                  |
| 683:                 |                  |                         |                     |                         | į                  |                      |               | ļ                |             |                       |                       |
| Susitna              | 0-2<br>  2-3     | 0.07-0.18<br> 0.80-0.90 | 0.7-2<br>  0.7-2    | 0.35-0.50<br> 0.19-0.23 | <br> 0.0-2.9       | 75-90<br>  2.0-5.0   | <br>  .37     | <br> .37         | 3<br>       | 2<br>                 | 134                   |
|                      | 3-45             | 0.90-1.00               | 0.7-2               | 0.15-0.17               | 0.0-2.9            | 0.0-2.0              | .32           | .37              |             | <u> </u>              | İ                     |
|                      | 45-60<br>        | 1.50-1.60               | 6-20                | 0.02-0.04               | 0.0-2.9            | 0.0-0.5              | .05<br>       | .20<br>          | <br>        | <br>                  | <br>                  |
| 884:                 |                  | 0.05.046                | 0.00                | 0.05.0.05               | İ                  | 05.05                |               | ļ                |             |                       |                       |
| Talkeetna            | 0-2<br>  2-7     | 0.05-0.10<br>0.75-0.90  | 6-20<br>  2-6       | 0.05-0.35<br>0.32-0.36  | <br> 0.0-2.9       | 85-95<br>  4.0-20    | <br>  .37     | <br> .37         | 1<br>       | 2<br>                 | 134                   |
|                      | i 7-19           | 0.75-0.90               | 2-6                 | 0.32-0.36               | 0.0-2.9            | 7.0-20               | .37           | .37              | į           | į                     | į                     |
|                      | 19-60            | 1.60-1.80               | 0.2-2               | 0.06-0.08               | 0.0-2.9            | 0.2-2.0              | 1.10          | .32              |             |                       |                       |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                   | <br>  Depth              | <br>  Moist                                                            | <br>  Permeability    | <br>  Available                                                        | <br>  Linear                                 | <br>  Organic                                            | Eros                          | sion fa                               | ctors                           | Wind<br>  erodi-      | Wind<br>  erodi-             |
|------------------------------|--------------------------|------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------|-------------------------------|---------------------------------------|---------------------------------|-----------------------|------------------------------|
| and soil name                | <br>                     | bulk density                                                           |                       | water capacity                                                         | extensi-<br>bility                           | matter<br>                                               | <br>  Kw                      | <br>  Kf                              | <br>  T                         | bility<br>  group     | bility<br>  index            |
|                              | In.                      | g/cc                                                                   | In/Hr                 | In/In                                                                  | Pct.                                         | Pct.                                                     | ļ                             |                                       | <br>                            | <br>                  |                              |
| 685:<br>Talkeetna            | 2-7<br>  7-19            | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90                             | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.32-0.36<br> 0.32-0.36                             | <br> <br> <br>  0.0-2.9<br>  0.0-2.9         | <br> <br>  85-95<br> 4.0-20<br> 7.0-20                   | <br> <br> .37<br> .37         | <br> <br> .37<br> .37                 | <br> <br>  1<br> <br>           | <br> <br>  2<br>      | <br> <br>  134<br>           |
|                              | 19-60<br>                | 1.60-1.80                                                              | 0.2-2<br>             | 0.06-0.08                                                              | 0.0-2.9<br>                                  | 0.2-2.0<br>                                              | .10<br>                       | .32<br>                               | <br>                            | <br>                  | <br>                         |
| 686:<br>Talkeetna            | 2-7<br>7-19              | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80               | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.32-0.36<br> 0.32-0.36<br> 0.06-0.08               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  4.0-20<br>  7.0-20<br>  0.2-2.0         |                               | <br> <br> .37<br> .37<br> .32         | <br>  1<br> <br> <br>           | <br>  2<br> <br>      | <br>  134<br> <br>           |
| Starichkof                   | <br>  0-7<br>  7-60      | <br> 0.05-0.10<br> 0.07-0.18                                           | <br>  6-20<br>  0.7-2 | <br> 0.05-0.35<br> 0.35-0.50                                           | <br> <br>                                    | <br>  85-95<br>  75-90                                   | <br> <br>                     | <br> <br>                             | <br> 5<br>                      | <br>  8<br>           | <br>  0<br>                  |
| 687:<br>Tangerra             | 4-8<br>  8-16<br>  16-46 | <br> 0.07-0.18<br> 0.80-1.10<br> 1.20-1.30<br> 1.30-1.60<br> 1.40-1.60 | 0.6-2<br>2-6<br>6-20  | <br> 0.35-0.50<br> 0.25-0.27<br> 0.20-0.23<br> 0.05-0.08<br> 0.03-0.06 | 0.0-2.9                                      | 75-90<br>  6.0-10<br>  2.0-5.0<br>  0.1-1.0<br>  0.1-1.0 | .24                           | <br> <br> .20<br> .15<br> .24<br> .24 | <br> <br>  1<br> <br> <br> <br> | <br>  1<br> <br> <br> | <br>  160<br> <br> <br> <br> |
| 688:<br>Beaches, tidal flats | <br> <br>                | <br> <br>                                                              | <br>                  | <br>                                                                   | <br> <br>                                    | <br> <br>                                                | <br>                          |                                       | <br> -<br> -                    | <br> <br>             |                              |
| 689:<br>Tlikakila            | 1-19<br>19-34            | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.30<br> 1.50-1.60               | 2-6<br>  2-6          | <br> 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13<br> 0.03-0.05               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  4.0-10<br>  0.2-2.0<br>  0.0-0.1        | <br> <br> .37<br> .15<br> .05 | <br> <br> .37<br> .24<br> .24         | <br> <br> 2<br> <br>            | <br> <br>  8<br> <br> | <br> <br>  0<br> <br>        |
| 690:<br>Tlikakila            | 1-19<br>  19-34          | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.30<br> 1.50-1.60               | 2-6<br>2-6            | <br> 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13<br> 0.03-0.05               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  4.0-10<br>  0.2-2.0<br>  0.0-0.1        | .37<br>  .15                  | <br> <br> .37<br> .24<br> .24         | <br> <br> 2<br> <br>            | <br> <br>  8<br> <br> | <br> <br>  0<br> <br>        |
| 591:<br>Tlikakila            | 1-19<br>  19-34          | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.30<br> 1.50-1.60               | 2-6<br>  2-6          | <br> 0.35-0.50<br> 0.30-0.35<br> 0.10-0.13<br> 0.03-0.05               | 0.0-2.9                                      | •                                                        |                               |                                       | <br> <br> 2<br> <br>            | <br> <br>  8<br>      | <br> <br>  0<br> <br> <br>   |
| 692:<br>Tokositna            | 2-13<br>13-24            | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80               | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.30-0.34<br> 0.30-0.34<br> 0.06-0.08               |                                              | <br>  85-95<br>  5.0-15<br>  1.0-6.0<br>  0.0-1.0        | .43                           | <br> <br> .32<br> .43<br> .37         | <br> <br> 2<br> <br>            | <br> <br>  2<br>      | <br> <br>  134<br> <br> <br> |
| 693:<br>Tokositna            | 2-13<br>13-24            | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80               | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.30-0.34<br> 0.30-0.34<br> 0.06-0.08               | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  85-95<br>  5.0-15<br>  1.0-6.0<br>  0.0-1.0        | .43                           | <br> <br> .32<br> .43<br> .37         | <br> <br> 2<br> <br>            | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br> |
| 694:<br>Tokositna            | 2-13<br>13-24            | <br> 0.05-0.10<br> 0.75-0.90<br> 0.75-0.90<br> 1.60-1.80               | 2-6<br>  2-6          | <br> 0.05-0.35<br> 0.30-0.34<br> 0.30-0.34<br> 0.06-0.08               | 0.0-2.9                                      | <br>  85-95<br>  5.0-15<br>  1.0-6.0<br>  0.0-1.0        | .32<br>.43                    | <br> <br> .32<br> .43<br> .37         | <br> 2<br> <br> <br>            | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br> |

Table 10. Physical Properties of the Soils—Continued

| Map symbol                  | <br>  Depth                                     | <br>  Moist                                              | <br>  Permeability | •                                                        |                                              | , ,                                               |                               | Erosion factors               |                      | erodi- i                   | Wind<br>  erodi-             |
|-----------------------------|-------------------------------------------------|----------------------------------------------------------|--------------------|----------------------------------------------------------|----------------------------------------------|---------------------------------------------------|-------------------------------|-------------------------------|----------------------|----------------------------|------------------------------|
| and soil name               |                                                 | bulk<br>  density<br>                                    | <br> <br>          | water capacity                                           | extensi-<br>bility                           | matter<br>                                        | <br>  Kw                      | <br>  Kf                      | <br>  T              | bility<br>  group<br>      | bility<br>  index            |
|                             | ln.                                             | g/cc                                                     | In/Hr              | In/In                                                    | Pct.                                         | Pct.                                              | ļ                             |                               |                      | <br>                       |                              |
| 695:<br>Truuli              | 9-19<br>19-43                                   | <br> 0.20-0.30<br> 0.60-0.70<br> 1.10-1.30<br> 1.20-1.40 | 2-6<br>  2-6       | <br> 0.40-0.55<br> 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  60-85<br>  6.0-15<br>  0.3-2.2<br>  0.0-1.0 | <br> <br> .20<br> .43<br> .15 | <br> <br> .20<br> .43<br> .24 | <br> <br> 2<br> <br> | <br> <br>  8<br> <br>      | <br> <br>  0<br> <br>        |
| 596:                        |                                                 | <br>                                                     | ]<br>]             | <br>                                                     | <br>                                         | <br>                                              | <br>                          |                               | <br>                 | <u> </u>                   | <br>                         |
| Tutka                       | - 0-7<br>  7-13<br>  13-21<br>  21-60           | 0.07-0.18<br> 0.50-0.70<br> 0.70-0.90<br>                | 2-6                | 0.35-0.50<br> 0.32-0.36<br> 0.18-0.24                    | <br>  0.0-2.9<br>  0.0-2.9<br>               | 75-90<br>6.0-20<br>10-20                          | <br>  .28<br>  .10<br>        | .28                           | 2<br> <br> <br>      | 2<br> <br> <br>            | 134<br> <br> <br>            |
| Kasitsna                    | 3-18<br>18-31                                   | 0.07-0.18<br> 0.50-0.90<br> 1.20-1.30<br> 1.60-1.80      | 2-6<br>0.7-6       | 0.35-0.50<br> 0.30-0.35<br> 0.15-0.22<br> 0.06-0.15      | <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9      | 75-90<br>4.0-10<br>3.0-6.0<br>0.0-0.5             |                               | <br>  .32<br>  .49<br>  .49   | <br> 2<br> <br>      | <br>  2<br> <br>           | <br>  134<br> <br> <br>      |
| Rock outcrop                | <br>-                                           |                                                          | <br>               | <br>                                                     | <br>                                         | <br>                                              | <br>                          | <br>                          | <br> -               | <br>                       |                              |
| 597:<br>Tutka               | <br> -<br>  0-7<br>  7-13<br>  13-21<br>  21-60 | <br> 0.07-0.18<br> 0.50-0.70<br> 0.70-0.90<br>           | 2-6                | <br> 0.35-0.50<br> 0.32-0.36<br> 0.18-0.24<br>           | <br> <br> 0.0-2.9<br> 0.0-2.9<br>            | <br>  75-90<br>  6.0-20<br>  10-20<br>            | <br> <br> .28<br> .10<br>     | <br> <br> .28<br> .28         | <br> 2<br> <br> <br> | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| Portgraham                  | <br>-  0-2<br>  2-4<br>  4-27<br>  27-60        | <br> 0.05-0.10<br> 0.50-0.70<br> 0.50-0.70<br>           | 2-6                | <br> 0.05-0.35<br> 0.30-0.34<br> 0.27-0.34<br>           | <br> <br>  0.0-2.9<br>  0.0-2.9<br>          | <br>  85-95<br>  2.0-8.0<br>  6.0-20<br>  0.0-0.0 | <br> <br> .37<br> .32<br>     | <br> <br> .37<br> .37         | <br> 2<br> <br>      | <br>  2<br> <br>           | <br>  134<br> <br>           |
| 698:<br>Tuxedni             | 2-24<br>24-36                                   | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.80<br> 1.20-1.30 | 2-6<br>  0.7-2     | <br> 0.35-0.50<br> 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  6.0-10<br>  0.2-2.0<br>  0.2-2.0 | .24<br>.43                    | <br> <br> .24<br> .49<br> .32 | <br> <br> 2<br> <br> | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 899:<br>Tuxedni             | 2-24                                            | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.80<br> 1.20-1.30 | 2-6<br>  0.7-2     | <br> 0.35-0.50<br> 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13 | 0.0-2.9                                      |                                                   | .24<br>.43                    |                               | <br> <br> 2<br> <br> | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br> <br> |
| 700:<br>Tuxedni, warm       | 2-24                                            | <br> 0.07-0.18<br> 0.60-0.70<br> 1.20-1.80<br> 1.20-1.30 | 2-6<br>  0.7-2     | <br> 0.35-0.50<br> 0.30-0.35<br> 0.32-0.35<br> 0.10-0.13 | <br> <br>  0.0-2.9<br>  0.0-2.9<br>  0.0-2.9 | <br>  75-90<br>  6.0-10<br>  0.2-2.0<br>  0.2-2.0 | <br> <br> .24<br> .43<br> .17 | <br> <br> .24<br> .49<br> .32 | <br> <br> 2<br> <br> | <br> <br>  2<br> <br>      | <br> <br>  134<br> <br> <br> |
| 701:<br>Typic Cryaquents    | <br> -<br>  0-2<br>  2-6<br>  6-60              | <br> 0.10-0.18<br> 1.20-1.40<br> 1.40-1.70               | 0.06-2             | <br> 0.35-0.50<br> 0.20-0.27<br> 0.02-0.20               | <br> <br> <br>  0.0-5.0<br>  0.0-2.9         | <br>  75-90<br>  0.5-3.0<br>  0.0-1.0             | <br> <br> .43<br> .10         | <br> <br> .43<br> .20         | <br> <br> 1<br>      | <br> <br>  8<br>           | <br> <br>  0<br>             |
| 702:<br>Typic Cryopsamments | <br> <br>-  0-60                                | <br> <br> 1.30-1.45                                      | <br> <br>  6-20    | <br> <br> 0.04-0.08                                      | <br> <br>  0.0-2.9                           | <br> <br> 0.0-0.2                                 | <br> <br> .10                 | <br> <br> .10                 | <br> <br> 1          | <br> <br>  1               | <br> <br>  160               |
| 703:<br>Typic Cryorthents   | j<br>I                                          | <br> 0.05-0.10<br> 1.25-1.70<br> 1.35-1.80               |                    | <br> 0.05-0.35<br> 0.16-0.27<br> 0.12-0.27               | <br> <br> <br>  0.0-5.9<br>  0.0-5.0         | <br>  85-95<br>  0.1-0.5<br>  0.0-0.2             | <br> <br> .37<br> .32         | <br> <br> .49<br> .43         | <br> <br> 5<br> <br> | <br> <br>  3<br> <br> <br> | <br> <br>  86<br> <br>       |

Table 10. Physical Properties of the Soils—Continued

| Map symbol           | <br> Depth   Moist | <br>  Moist                                              | <br>  Permeability | <br>  Available                                          | <br>  Linear                              | <br>  Organic                                     | Eros                          | Erosion factors               |                           | erodi-                | Wind<br>  erodi-             |
|----------------------|--------------------|----------------------------------------------------------|--------------------|----------------------------------------------------------|-------------------------------------------|---------------------------------------------------|-------------------------------|-------------------------------|---------------------------|-----------------------|------------------------------|
| and soil name        | i .<br>            | bulk density                                             |                    | water capacity                                           | extensi-<br>bility                        | matter                                            | Kw Kf T                       |                               | <br>  T                   | bility<br>group       | bility<br>  index            |
|                      | <br>  In.          | <br>  g/cc                                               | <br>  In/Hr        | l<br>  In/In                                             | Pct.                                      | Pct.                                              | <br>                          | <br>                          | <br>                      | <br>                  |                              |
| 704:<br>Urban land   | <br> <br>          | <br> <br>                                                | <br> <br>          | <br> <br>                                                | <br> <br>                                 | <br> <br>                                         | <br> <br>                     | <br> <br>                     | <br> <br> -               | <br> <br>             | <br> <br>                    |
| 705:<br>Water, fresh | <br> <br>          | <br> <br>                                                | <br> <br>          | <br> <br>                                                | <br> <br>                                 | <br> <br>                                         | <br> <br>                     | <br> <br>                     | <br> <br> -               | <br> <br>             |                              |
| 706:<br>Whitsol      | 3-29<br>29-51      | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>0.6-2       | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.02-0.03 | 0.0-2.9                                   | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 |                               |                               | <br> 3<br> <br> <br>      | <br>  2<br> <br>      | <br>  134<br> <br> <br>      |
| 707:<br>Whitsol      | 3-29<br>29-51      | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>  0.6-2     | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.02-0.03 |                                           | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 | .37                           | <br> <br> .37<br> .43<br> .15 | <br> <br> 3<br> <br> <br> | <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 708:<br>Whitsol      | 3-29<br>29-51      | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>  0.6-2     | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.02-0.03 | 0.0-2.9                                   | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 | .37                           | .43                           | <br> <br> 3<br> <br> <br> | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| 709:<br>Whitsol      | 3-29<br>  29-51    | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>  0.6-2     | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.02-0.03 |                                           | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 | .37                           | .37<br>.43                    | <br> <br> 3<br> <br> <br> | <br>  2<br> <br>      | <br> <br>  134<br> <br>      |
| 710:<br>Whitsol      | 3-29<br>29-51      | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>  0.6-2     |                                                          | <br> <br> 0.0-2.9<br> 0.0-2.9<br> 0.0-2.9 | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 | <br> <br> .37<br> .43<br> .10 | .37<br>.43                    | <br> <br> 3<br> <br> <br> | <br> <br>  2<br> <br> | <br> <br>  134<br> <br> <br> |
| 711:<br>Whitsol      | 3-29<br>29-51      | <br> 0.05-0.10<br> 0.70-0.80<br> 1.00-1.50<br> 1.30-1.40 | 2-6<br>  0.6-2     | <br> 0.05-0.35<br> 0.30-0.32<br> 0.30-0.32<br> 0.02-0.03 | 0.0-2.9                                   | <br>  85-95<br>  5.0-10<br>  0.2-2.0<br>  0.1-0.6 | .37<br>.43                    | <br> <br> .37<br> .43<br> .15 | <br> <br> 3<br> <br>      | <br> <br>  2<br> <br> | <br> <br>  134<br> <br>      |
| Doroshin             |                    | <br> 0.07-0.18<br> 1.30-1.40                             | 1                  | <br> 0.35-0.50<br> 0.18-0.22                             | <br> <br>  0.0-2.9                        | <br>  75-90<br>  0.3-2.2                          | <br> <br> .43                 | <br> <br> .43                 | <br> 2<br>                | <br>  8<br>           | <br>  0<br>                  |

**Table 11. Chemical Properties of the Soils** 

(Absence of an entry indicates that data were not estimated.)

| Map symbol and soil name            | <br> <br>  Depth<br>                               | Cation exchange capacity                   | Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                               |
|-------------------------------------|----------------------------------------------------|--------------------------------------------|---------------------------------------------------|-------------------------------------------------------------|
|                                     | <br>  In.                                          | <br>  meq/100 g                            | <br>  meq/100 g                                   | <br>  pH                                                    |
| 501:<br>Aquic Cryofluvents          | <br>  0-2<br>  2-6<br>  6-31<br>  31-48<br>  48-60 | <br>  15-25<br>  10-20<br>  5-15<br>  2-10 | 20-60<br>  3-15<br>  2-5<br>  1-5<br>  1-3        | 4.0-5.5<br>  5.0-6.0<br>  5.0-6.0<br>  5.1-6.0<br>  5.1-6.0 |
| 502:<br>Aquic Cryofluvents, shallow | <br>  0-2<br>  2-6<br>  6-19<br>  19-60            | <br> <br>  15-25<br>  5-15<br>  2-10       | <br>  20-60<br>  3-15<br>  1-5<br>  1-3           | 4.0-5.5<br>  5.0-6.0<br>  5.1-6.0<br>  5.1-6.0              |
| 503:<br>Badland, sea cliffs         | <br> <br>                                          |                                            | <br> <br>                                         |                                                             |
| 504:<br>Badland, sea cliffs         | <br> <br>                                          |                                            | <br>                                              |                                                             |
| Typic Cryorthents                   | <br>  0-1<br>  1-33<br>  33-60                     | <br> <br> <br>                             | <br>  20-60<br>  3-15<br>  3-15                   | 4.0-5.5<br>  4.8-7.3<br>  4.8-8.0                           |
| 505:<br>Beaches                     | <br> <br>                                          |                                            |                                                   |                                                             |
| 506:<br>Beluga                      | <br>  0-5<br>  5-7<br>  7-32<br>  32-60            | <br> <br> <br>  2-7<br>  14-20             | <br>  15-70<br>  5-15<br> <br>                    | <br>  5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8        |
| 507:<br>Beluga                      | <br>  0-5<br>  5-7<br>  7-32<br>  32-60            | <br> <br> <br>  2-7<br>  14-20             | <br>  15-70<br>  5-15<br> <br>                    | 5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8              |
| 508:<br>Beluga                      | <br>  0-5<br>  5-7<br>  7-32<br>  32-60            | <br> <br> <br>  2-7<br>  14-20             | <br>  15-70<br>  5-15<br> <br>                    | <br>  5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8        |
| 509:<br>Beluga                      | <br>  0-5<br>  5-7<br>  7-32<br>  32-60            | <br> <br> <br>  2-7<br>  14-20             | <br>  15-70<br>  5-15<br> <br>                    | <br>  5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8        |
| Mutnala                             | <br>  0-4<br>  4-7<br>  7-23<br>  23-60            | <br> <br> <br>                             | <br>  15-70<br>  5-25<br>  2-8<br>                | 4.0-6.0<br>  4.5-5.0<br>  5.1-5.5<br>  5.1-6.0              |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br>  Depth<br>                         | Cation exchange capacity             | <br>  Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br>                         |
|--------------------------|-----------------------------------------|--------------------------------------|---------------------------------------------------------|------------------------------------------------------|
|                          | In.                                     | meq/100 g                            |                                                         | pH                                                   |
| 510:<br>Beluga           | <br>  0-5<br>  5-7<br>  7-32<br>  32-60 | <br> <br>  2-7<br>  14-20            | <br>  15-70<br>  5-15<br>                               | <br>  5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8 |
| Smokey Bay               | <br>  0-2<br>  2-9<br>  9-55<br>  55-60 | <br> <br>  20-50<br>  5-15<br>  5-15 | <br>  25-110<br> <br> <br>                              | <br>  4.0-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-7.0 |
| 511:<br>Beluga           | <br>  0-5<br>  5-7<br>  7-32<br>  32-60 | <br> <br> <br>  2-7<br>  14-20       | <br>  15-70<br>  5-15<br>                               | <br>  5.1-5.5<br>  5.1-6.5<br>  5.6-6.8<br>  5.6-6.8 |
| Smokey Bay               | <br>  0-2<br>  2-9<br>  9-55<br>  55-60 | <br>  20-50<br>  5-15<br>  5-15      | <br>  25-110<br> <br>                                   | <br>  4.0-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-7.0 |
| 512:<br>Benka            | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br>  20-50<br>  1-5            | <br>  20-60<br>  5-15<br> <br>                          | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| 513:<br>Benka            | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5       | <br>  20-60<br>  5-15<br>                               | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| 514:<br>Benka            | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5       | <br>  20-60<br>  5-15<br> <br>                          | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| 515:<br>Benka            | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5       | <br>  20-60<br>  5-15<br> <br>                          | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| 516:<br>Benka            | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5       | <br>  20-60<br>  5-15<br> <br>                          | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name           | <br> <br>  Depth<br>                    | Cation exchange capacity       | Effective   cation   exchange   capacity | Soil reaction                                        |
|------------------------------------|-----------------------------------------|--------------------------------|------------------------------------------|------------------------------------------------------|
|                                    | <br>  In.                               | meq/100 g                      | meq/100 g                                | <br>  pH                                             |
| 517:<br>Benka, strongly sloping    | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5 | <br>  20-60<br>  5-15<br>                | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| Benka, gently sloping              | <br>  0-3<br>  3-5<br>  5-30<br>  30-60 | <br> <br> <br>  20-50<br>  1-5 | 20-60<br>  5-15<br>                      | <br>  4.0-5.5<br>  4.5-5.5<br>  5.1-6.0<br>  5.6-6.5 |
| 518:<br>Boxcar                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> <br> <br> <br>  2-10      | <br>  20-60<br>  5-15<br>  5-25<br>      | <br>  4.0-5.5<br>  4.5-6.0<br>  4.5-6.0<br>  5.6-6.5 |
| 519:<br>Boxcar                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> <br> <br>  2-10           | <br>  20-60<br>  5-15<br>  5-25<br>      | 4.0-5.5<br>  4.5-6.0<br>  4.5-6.0<br>  5.6-6.5       |
| 520:<br>Boxcar                     | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> <br> <br> <br>  2-10      | <br>  20-60<br>  5-15<br>  5-25<br>      | 4.0-5.5<br>  4.5-6.0<br>  4.5-6.0<br>  5.6-6.5       |
| 521:<br>Boxcar, cool               | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> <br> <br>  2-10           | <br>  20-60<br>  5-15<br>  5-25<br>      | 4.0-5.5<br>  4.5-6.0<br>  4.5-6.0<br>  5.6-6.5       |
| 522:<br>Boxcar, cool               | <br>  0-3<br>  3-5<br>  5-20<br>  20-60 | <br> <br> <br>  2-10           | <br>  20-60<br>  5-15<br>  5-25<br>      | 4.0-5.5<br>  4.5-6.0<br>  4.5-6.0<br>  5.6-6.5       |
| 523:<br>Chenega                    | <br>  0-4<br>  4-7<br>  7-60            | <br> <br> <br>                 | <br>  15-50<br>  5-25<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  4.5-6.0              |
| 524:<br>Chenega, cool              | <br>  0-4<br>  4-7<br>  7-60            | <br> <br> <br>                 | <br>  15-50<br>  5-25<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  4.5-6.0              |
| 525: Chenega, occasionally flooded | <br>  0-4<br>  4-7<br>  7-60            | <br> <br> <br>                 | <br>  15-50<br>  5-25<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  4.5-6.0              |
| 526:<br>Chulitna                   | <br>  0-2<br>  2-33<br>  33-60          | <br> <br>                      | <br>  20-60<br>  5-20<br>  1-5           | 3.5-5.5<br>4.5-5.5<br>4.5-5.5                        |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                 | Cation exchange capacity | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                               |
|--------------------------|-------------------------------------------|--------------------------|---------------------------------------------------|------------------------------------------------------|
|                          | <br>  In.                                 | meq/100 g                | meq/100 g                                         | pH                                                   |
| 527:<br>Chulitna         | <br> <br>  0-2<br>  2-33<br>  33-60       | <br> <br>                | <br>  20-60<br>  5-20<br>  1-5                    | <br> 3.5-5.5<br> 4.5-5.5<br> 4.5-5.5                 |
| 528:<br>Chulitna         | <br>  0-2<br>  2-33<br>  33-60            | <br> <br> <br>           | <br>  20-60<br>  5-20<br>  1-5                    | <br> 3.5-5.5<br> 4.5-5.5<br> 4.5-5.5                 |
| 529:<br>Chulitna         | <br>  0-2<br>  2-33<br>  33-60            | <br> <br>                | <br>  20-60<br>  5-20<br>  1-5                    | <br> 3.5-5.5<br> 4.5-5.5<br> 4.5-5.5                 |
| 530:<br>Chunilna         | <br>  0-4<br>  4-8<br>  8-18<br>  18-60   | <br> <br> <br>           | <br>  15-70<br>  5-15<br>  5-15<br>  1-5          | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 531:<br>Chunilna         | <br>  0-4<br>  4-8<br>  8-18<br>  18-60   | <br> <br> <br>           | <br>  15-70<br>  5-15<br>  5-15<br>  1-5          | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 532:<br>Chunilna, cool   | <br>  0-4<br>  4-8<br>  8-18<br>  18-60   | <br> <br> <br>           | <br>  15-70<br>  5-15<br>  5-15<br>  1-5          | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 533:<br>Chunilna, cool   | <br>  0-4<br>  4-8<br>  8-18<br>  18-60   | <br> <br> <br>           | <br>  15-70<br>  5-15<br>  5-15<br>  1-5          | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 534:<br>Clam Gulch       | <br>  0-3<br>  3-15<br>  15-60            | <br> <br> <br>  10-33    | <br>  20-60<br>  5-30<br>                         | <br> 4.0-5.5<br> 4.5-5.5<br> 5.6-6.0                 |
| 535:<br>Clunie           | <br>  0-33<br>  33-60                     | <br> <br>  14-20         | <br>  20-60<br>                                   | 4.0-6.5<br>  5.6-7.3                                 |
| 536:<br>Coal Creek       | <br>  0-6<br>  6-15<br>  15-23<br>  23-60 | <br> <br> <br>           | <br>  20-60<br>  5-25<br>  5-15<br>  5-15         | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5 |
| 537:<br>Coal Creek       | <br>  0-6<br>  6-15<br>  15-23<br>  23-60 | <br> <br> <br>           | <br>  20-60<br>  5-25<br>  5-15<br>  5-15         | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                 | Cation exchange capacity       | Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br> <br>                    |
|--------------------------|-------------------------------------------|--------------------------------|---------------------------------------------------|------------------------------------------------------|
|                          | <br>  In.<br>                             | <br>  meq/100 g                |                                                   | <br>  pH                                             |
| 538:<br>Coal Creek       | <br>  0-6<br>  6-15<br>  15-23<br>  23-60 | <br> <br> <br>                 | <br>  20-60<br>  5-25<br>  5-15<br>  5-15         | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 539:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5       |
| 540:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5       |
| 541:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5       |
| 542:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br>                        | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5 |
| 543:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br>                        | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5       |
| 544:<br>Cohoe            | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br>                        | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5       |
| 545:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5 |
| 546:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5 |
| 547:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br>  24-52<br>  52-60 | <br> <br> <br>  5-15<br>  1-15 | <br>  15-70<br>  10-40<br> <br>                   | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name             | Depth                                              | Cation exchange capacity             | <br>  Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br> <br>                            |
|--------------------------------------|----------------------------------------------------|--------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|
|                                      | <br>  In.                                          | <br>  meq/100 g                      | <br>  meq/100 g                                         | <br>  pH                                                     |
| 548:<br>Cohoe, dry                   | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br> <br>  5-15<br>  1-15  | <br> <br>  15-70<br>  10-40<br>                         | <br> 4.0-6.0<br> 4.5-6.0<br> 5.6-6.2<br> 5.6-6.5             |
| 549:<br>Cohoe, dry                   | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br>                              | <br> 4.0-6.0<br> 4.5-6.0<br> 5.6-6.2<br> 5.6-6.5             |
| 550:<br>Cohoe, dry                   | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br>                              | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5         |
| 551:<br>Cohoe, moderately steep      | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br>                              | <br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5         |
| Cohoe, gently sloping                | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br>                              | <br> 4.0-6.0<br> 4.5-6.0<br> 5.6-6.2<br> 5.6-6.5             |
| 552:<br>Cohoe, dry, moderately steep | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br> <br>  15-70<br>  10-40<br> <br>                    | <br> 4.0-6.0<br> 4.5-6.0<br> 5.6-6.2<br> 5.6-6.5             |
| Cohoe, dry, gently sloping           | <br>  0-2<br>  2-24<br> 24-52<br> 52-60            | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br> <br>                         | <br> 4.0-6.0<br> 4.5-6.0<br> 5.6-6.2<br> 5.6-6.5             |
| 553:<br>Cohoe, dry                   | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15       | <br>  15-70<br>  10-40<br>                              | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5               |
| Kenai                                | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br> <br>                     | <br> 4.0-6.0<br> 4.3-5.5<br> 4.8-6.0<br> 5.5-6.5<br> 6.0-7.0 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br>  Depth<br>                                    | Cation exchange capacity                  | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                               |
|--------------------------|----------------------------------------------------|-------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|
|                          | In.                                                | meq/100 g                                 | meq/100 g                                               | pH                                                          |
| 554:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15            | <br>  15-70<br>  10-40<br> <br>                         | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5              |
| Kenai                    | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br> <br>                     | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 555:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br>  24-52<br>  52-60          | <br> <br> <br>  5-15<br>  1-15            | <br>  15-70<br>  10-40<br> <br>                         | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5              |
| Nikolai                  | <br>  0-2<br>  2-32<br>  32-41<br>  41-60          | <br> <br> <br>                            | <br>  15-70<br>  25-110<br>  2-5<br>  1-3               | 4.0-6.0<br>  4.0-5.5<br>  4.5-5.5<br>  4.8-6.2              |
| 556:<br>Cohoe, dry       | <br>  0-2<br>  2-24<br> 24-52<br>  52-60           | <br> <br> <br>  5-15<br>  1-15            | <br>  15-70<br>  10-40<br>                              | 4.0-6.0<br>  4.5-6.0<br>  5.6-6.2<br>  5.6-6.5              |
| Nikolai                  | <br>  0-2<br>  2-32<br>  32-41<br>  41-60          | <br> <br> <br>                            | <br>  15-70<br>  25-110<br>  2-5<br>  1-3               | 4.0-6.0<br>  4.0-5.5<br>  4.5-5.5<br>  4.8-6.2              |
| 557:<br>Cytex Creek      | <br>  0-2<br>  2-3<br>  3-7<br>  7-31<br>  31-60   | <br> <br> <br> <br>  2-8                  | <br>  20-60<br>  5-15<br>  5-20<br>  3-10<br>  1-4      | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.6<br>  4.5-5.6<br>  5.4-6.0 |
| 558:<br>Doroshin         | <br>  0-36<br>  36-60<br>                          | <br> <br>                                 | <br>  15-70<br>                                         | <br>  4.0-6.0<br>  4.5-5.5<br>                              |
| 559:<br>Doroshin         | <br>  0-36<br>  36-60<br>                          | <br> <br>                                 | <br>  15-70<br>                                         | <br>  4.0-6.0<br>  4.5-5.5                                  |
| 560:<br>Dystrocryepts    | <br>  0-2<br>  2-7<br>  7-23<br>  23-60            | <br> <br> <br>                            | <br>  20-60<br>  1-5<br>  1-6<br>  2-9                  | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5        |
| Typic Cryorthents        | <br>  0-1<br>  1-33<br>  33-60<br>                 | <br> <br> <br>                            | <br>  20-60<br>  3-15<br>  3-15<br>                     | <br>  4.0-5.5<br>  4.8-7.3<br>  4.8-8.0<br>                 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br>  Depth<br> <br>                                 | Cation exchange capacity          | Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                                     |
|--------------------------|------------------------------------------------------|-----------------------------------|---------------------------------------------------|-------------------------------------------------------------------|
|                          | <br>  In.                                            | meq/100 g                         | meq/100 g                                         | pH                                                                |
| 560:<br>Iliamna, cool    | <br>  0-2<br>  2-29<br>  29-60                       | <br> <br> <br>  2-10              | <br>  15-70<br>  5-25<br>                         | <br>  4.0-6.0<br>  5.1-6.0<br>  5.6-6.0                           |
| 561:<br>Foreland         | <br>  0-13<br>  13-19<br>  19-60                     | <br> <br>  2-15<br>  2-15         | <br>  20-60<br> <br>                              | <br>  4.0-5.5<br>  5.5-7.0<br>  5.5-7.0                           |
| 562:<br>Foreland         | <br>  0-13<br>  13-19<br>  19-60                     | <br> <br>  2-15<br>  2-15         | <br>  20-60<br> <br>                              | <br>  4.0-5.5<br>  5.5-7.0<br>  5.5-7.0                           |
| Soldotna                 | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60   | <br> <br> <br>  5-15<br>  2-9     | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3 | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| Starichkof               | <br>  0-7<br>  7-60                                  | <br> <br>                         | <br>  20-60<br>  20-60                            | 4.0-5.0                                                           |
| 563:<br>Pits, gravel     | <br> <br>                                            |                                   | <br> <br>                                         |                                                                   |
| 564:<br>Iliamna          | <br>  0-2<br>  2-29<br>  29-60                       | <br> <br> <br>  2-10              | <br>  15-70<br>  5-25<br>                         | <br>  4.0-6.0<br>  5.1-6.0<br>  5.6-6.0                           |
| 565:<br>Iliamna          | <br>  0-2<br>  2-29<br>  29-60                       | <br> <br> <br>  2-10              | <br> <br>  15-70<br>  5-25<br>                    | <br>  4.0-6.0<br>  5.1-6.0<br>  5.6-6.0                           |
| 566:<br>Iliamna          | <br>  0-2<br>  2-29<br>  29-60                       | <br> <br> <br>  2-10              | <br>  15-70<br>  5-25<br>                         | <br>  4.0-6.0<br>  5.1-6.0<br>  5.6-6.0                           |
| 567:<br>Iliamna, cool    | <br>  0-2<br>  2-29<br>  29-60                       | <br> <br> <br>  2-10              | <br>  15-70<br>  5-25<br>                         | <br>  4.0-6.0<br>  5.1-6.0<br>  5.6-6.0                           |
| 568:<br>Island           | <br>  0-1<br>  1-13<br>  13-24<br>  24-33<br>  33-60 | <br> <br> <br>  2-9<br>  2-9      | <br>  20-60<br>  5-15<br>  5-15<br>               | 4.0-5.5<br>  5.1-5.5<br>  5.1-5.5<br>  5.6-6.2<br>  5.6-6.0       |
| 569:<br>Island           | <br>  0-1<br>  1-13<br>  13-24<br>  24-33<br>  33-60 | <br> <br> <br> <br>  2-9<br>  2-9 | <br>  20-60<br>  5-15<br>  5-15<br>               | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5<br>  5.6-6.2<br>  5.6-6.0 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br>  Depth<br>                                      | Cation exchange capacity          | <br>  Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br>                                      |
|--------------------------|------------------------------------------------------|-----------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|
|                          | <br>  In.                                            | meq/100 g                         | <br>  meq/100 g                                         | <br>  pH                                                          |
| 570:<br>Island           | <br>  0-1<br>  1-13<br>  13-24<br>  24-33<br>  33-60 | <br> <br> <br>  2-9<br>  2-9      | <br>  20-60<br>  5-15<br>  5-15<br>                     | 4.0-5.5<br>  5.1-5.5<br>  5.1-5.5<br>  5.6-6.2<br>  5.6-6.0       |
| 571:<br>Island           | <br>  0-1<br>  1-13<br>  13-24<br>  24-33<br>  33-60 | <br> <br> <br> <br>  2-9<br>  2-9 | <br>  20-60<br>  5-15<br>  5-15<br> <br>                | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5<br>  5.6-6.2<br>  5.6-6.0 |
| 572:<br>Island, forested | <br>  0-1<br>  1-13<br> 13-24<br> 24-33<br> 33-60    | <br> <br> <br> <br>  2-9<br>  2-9 | <br>  20-60<br>  5-15<br>  5-15<br>                     | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5<br>  5.6-6.2<br>  5.6-6.0 |
| 573:<br>Kachemak         | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0              |
| 574:<br>Kachemak         | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | 3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0                    |
| 575:<br>Kachemak         | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0              |
| 576:<br>Kachemak         | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0              |
| 577:<br>Kachemak         | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0              |
| 578:<br>Kachemak, cool   | <br>  0-3<br>  3-8<br>  8-30<br>  30-60              | <br> <br> <br>                    | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | 3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0                    |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name   | <br> <br>  Depth<br>                    | Cation exchange capacity  | Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                        |
|----------------------------|-----------------------------------------|---------------------------|---------------------------------------------------|------------------------------------------------------|
|                            | <br>  In.                               | <br>  meq/100 g           | meq/100 g                                         | <br>  pH                                             |
| 579:<br>Kachemak, cool     | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 580:<br>Kachemak, cool     | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br> 3.5-5.5<br> 4.0-6.0<br> 4.0-6.0<br> 4.5-6.0     |
| 581:<br>Kachemak, cool     | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 582:<br>Kachemak, cool     | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 583:<br>Kachemak, forested | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 584:<br>Kachemak, forested | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 585:<br>Kachemak, forested | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| 586:<br>Kachemak, cool     | <br>  0-3<br>  3-8<br>  8-30<br>  30-60 | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5          | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| Snowdance                  | <br>  0-3<br>  3-8<br>  8-24<br>  24-60 | <br> <br> <br> <br>  4-15 | <br>  20-60<br>  5-15<br>  5-10<br>  2-5          | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                 | Cation exchange capacity  | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                        |
|--------------------------|-------------------------------------------|---------------------------|---------------------------------------------------------|------------------------------------------------------|
|                          | <br>  In.<br>                             | <br>  meq/100 g           | <br>  meq/100 g<br>                                     | <br>  pH<br>                                         |
| 587:<br>Kachemak, cool   | <br>  0-3<br>  3-8<br>  8-30<br>  30-60   | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| Snowdance                | <br>  0-3<br>  3-8<br>  8-24<br>  24-60   | <br> <br> <br>  4-15      | <br>  20-60<br>  5-15<br>  5-10<br>  2-5                | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |
| 588:<br>Kachemak, cool   | <br>  0-3<br>  3-8<br>  8-30<br>  30-60   | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-15<br>  2-5                | <br>  3.5-5.5<br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.0 |
| Snowdance                | <br>  0-3<br>  3-8<br>  8-24<br>  24-60   | <br> <br> <br> <br>  4-15 | <br>  20-60<br>  5-15<br>  5-10<br>  2-5                | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |
| 589:<br>Kalifonsky       | <br>  0-2<br>  2-9<br>  9-16<br>  16-60   | <br> <br> <br>            | <br>  15-70<br>  5-15<br>  1-5<br>  1-3                 | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |
| 590:<br>Kalifonsky       | <br>  0-2<br>  2-9<br>  9-16<br>  16-60   | <br> <br> <br>            | <br>  15-70<br>  5-15<br>  1-5<br>  1-3                 | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |
| 591:<br>Kalifonsky       | <br>  0-2<br>  2-9<br>  9-16<br>  16-60   | <br> <br> <br>            | <br>  15-70<br>  5-15<br>  1-5<br>  1-3                 | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0 |
| Typic Cryorthents        | <br>  0-1<br>  1-33<br>  33-60            | <br> <br> <br>            | <br>  20-60<br>  3-15<br>  3-15                         | <br>  4.0-5.5<br>  4.8-7.3<br>  4.8-8.0              |
| 592:<br>Karluk           | <br>  0-3<br>  3-10<br>  10-17<br>  17-60 | <br> <br> <br>            | <br>  25-110<br>  5-30<br>  5-30<br>  5-30              | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5 |
| 593:<br>Kashwitna        | <br>  0-3<br>  3-5<br>  5-21<br>  21-60   | <br> <br> <br>            | <br>  20-60<br>  5-15<br>  5-25<br>  1-5                | <br> 3.6-5.5<br> 3.6-5.5<br> 4.5-5.5<br> 5.0-6.0     |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name            | Depth                                                | Cation exchange capacity             | Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                               |
|-------------------------------------|------------------------------------------------------|--------------------------------------|---------------------------------------------------|-------------------------------------------------------------|
|                                     | In.                                                  | meq/100 g                            | meq/100 g                                         | pH                                                          |
| 594:<br>Kashwitna                   | <br>  0-3<br>  3-5<br>  5-21<br>  21-60              | <br> <br> <br>                       | <br>  20-60<br>  5-15<br>  5-25<br>  1-5          | 3.6-5.5<br>  3.6-5.5<br>  4.5-5.5<br>  5.0-6.0              |
| 595:<br>Kashwitna                   | <br> -  0-3<br>  3-5<br>  5-21<br>  21-60            | <br> <br>                            | <br>  20-60<br>  5-15<br>  5-25<br>  1-5          | 3.6-5.5<br>  3.6-5.5<br>  4.5-5.5<br>  5.0-6.0              |
| 596:<br>Kashwitna, moderately steep | <br> -<br>  0-3<br>  3-5<br>  5-21<br>  21-60        | <br> <br> <br>                       | <br>  20-60<br>  5-15<br>  5-25<br>  1-5          | <br> 3.6-5.5<br> 3.6-5.5<br> 4.5-5.5<br> 5.0-6.0            |
| Kashwitna, strongly sloping         | <br>-   0-3<br>  3-5<br>  5-21<br>  21-60            | <br> <br>                            | <br>  20-60<br>  5-15<br>  5-25<br>  1-5          | 3.6-5.5<br>  3.6-5.5<br>  4.5-5.5<br>  5.0-6.0              |
| 597:<br>Kenai                       | <br> -  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 598:<br>Kenai                       | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60   | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 599:<br>Kenai                       | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60   | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 600:<br>Kenai                       | <br> -  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 601:<br>Kenai                       | <br> -  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br> <br>               | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name        | <br> <br>  Depth<br> <br>                          | Cation exchange capacity             | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reactior<br>                                      |
|---------------------------------|----------------------------------------------------|--------------------------------------|---------------------------------------------------|-------------------------------------------------------------|
|                                 | <br>  In.<br>                                      | meq/100 g                            | meq/100 g                                         | <br>  pH                                                    |
| 602:<br>Kenai, moderately steep | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| Kenai, gently sloping           | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | 15-70<br>  5-15<br> <br>                          | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| 603:<br>Kenai                   | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                    | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0 |
| Starichkof                      | <br>  0-7<br>  7-60                                | <br> <br>                            | 20-60<br>  20-60                                  | 4.0-5.0                                                     |
| 604:<br>Kichatna                | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>          | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |
| 005:<br>Kichatna                | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>          | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |
| 606:<br>Kichatna                | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>          | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |
| 507:<br>Kichatna                | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>          | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |
| 508:<br>Kichatna                | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>          | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |

Table 11. Chemical Properties of the Soils—Continued

|                             |                                           |                                              | 1                                                       | 1                                                    |
|-----------------------------|-------------------------------------------|----------------------------------------------|---------------------------------------------------------|------------------------------------------------------|
| Map symbol and soil name    | <br> <br>  Depth<br> <br>                 | <br>  Cation<br>  exchange<br>  capacity<br> | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                        |
|                             | <br>  In.                                 | <br>  meq/100 g                              | <br>  meq/100 g                                         | <br>  pH                                             |
| 609:                        |                                           |                                              |                                                         |                                                      |
| Kichatna                    | <br>  0-2<br>  2-4<br>  4-11              | <br> <br>                                    | <br>  15-25<br>  5-15<br>  5-15                         | 4.0-5.5<br>  5.1-6.0<br>  5.1-6.0                    |
|                             | 11-14<br>  14-60                          | 4-8<br>  3-5                                 | <br>                                                    | 5.6-6.0<br>  5.6-6.5                                 |
| Killey                      | İ                                         | <br> <br> <br>                               | <br>  20-60<br>  5-15<br>  1-5<br>  1-5                 | 4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5       |
| 610:<br>Kidazqeni           | <br>  0-4<br>  4-21<br>  21-60            | <br> <br>  5-15<br>  2-7                     | <br>  15-25<br> <br>                                    | <br>  4.5-5.5<br>  5.1-6.0<br>  5.1-6.0              |
| 611:<br>Killey              | <br>  0-2<br>  2-6<br>  6-29<br>  29-60   | <br> <br> <br>                               | <br>  20-60<br>  5-15<br>  1-5<br>  1-5                 | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  4.5-5.5 |
| Moose River                 | <br>  0-5<br>  5-10<br>  10-39<br>  39-60 | <br> <br>  30-60<br>  2-7<br>                | <br>  20-60<br> <br>                                    | <br>  4.0-5.5<br>  5.6-6.0<br>  5.6-6.0<br>  4.5-5.5 |
| 612:                        | <br>                                      | <br>                                         | <br>                                                    | <br>                                                 |
| Liten                       | 0-2<br>  2-8<br>  8-60                    | <br> <br>  1-5                               | 20-60<br>  5-25<br>                                     | 4.0-5.5<br>  4.5-6.0<br>  5.6-6.5                    |
| 613:<br>Lithic Haplocryands | <br>  0-2<br>  2-12<br>  12-60            | <br> <br>                                    | <br>  20-60<br>  5-15<br>                               | <br>  4.0-5.5<br>  4.5-5.5<br>                       |
| Alic Haplocryands           | <br>  0-4<br>  4-21<br> 21-31<br> 31-60   | <br> <br> <br>  5-15<br>                     | <br>  15-70<br>  5-15<br>  2-5<br>                      | <br>  4.0-6.0<br>  4.5-5.5<br>  5.1-6.0<br>          |
| Rock outcrop                | <br>                                      | <br>                                         | <br>                                                    |                                                      |
| 614:<br>Lithic Haplocryands | <br> <br>  0-2<br>  2-12<br>  12-60       | <br> <br> <br>                               | <br>  20-60<br>  5-15<br>                               | <br>  4.0-5.5<br>  4.5-5.5<br>                       |
| Alic Haplocryands           | <br>  0-4<br>  4-21<br> 21-31<br> 31-60   | <br> <br> <br>  5-15<br>                     | <br>  15-70<br>  5-15<br>  2-5<br>                      | <br>  4.0-6.0<br>  4.5-5.5<br>  5.1-6.0<br>          |
| Rock outcrop                | <br> <br>                                 | <br> <br>                                    | <br> <br>                                               | <br> <br>                                            |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | Depth                    | Cation exchange capacity | Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reactior<br> <br> |
|--------------------------|--------------------------|--------------------------|---------------------------------------------------|-----------------------------------|
|                          | <br>  In.                |                          | <br>  meq/100 g                                   | <br>  pH                          |
|                          |                          |                          | <br>                                              |                                   |
| 315:                     |                          |                          |                                                   |                                   |
| Longmare                 | 0-3                      |                          | 15-70                                             | 4.0-5.0                           |
|                          | 4-6<br>  6-18            |                          | 3-15<br>  3-15                                    | 4.5-5.3<br>  4.9-5.7              |
|                          | 18-29                    | 10-25                    | 3-13                                              | 5.0-6.0                           |
|                          | 29-60                    | 2-9                      | 1-3                                               | 5.3-6.5                           |
| 16:                      |                          |                          |                                                   |                                   |
| ongmare                  | 0-3                      | j                        | 15-70                                             | 4.0-5.0                           |
|                          | 4-6                      |                          | 3-15                                              | 4.5-5.3                           |
|                          | 6-18                     |                          | 3-15                                              | 4.9-5.7                           |
|                          | 18-29                    | 10-25                    | 3-7                                               | 5.0-6.0                           |
|                          | 29-60<br>                | 2-9<br>                  | 1-3<br>                                           | 5.3 <b>-</b> 6.5                  |
| 17:<br>Mutnala           |                          | j<br>                    | <br>  15-70                                       | <br>  4.0-6.0                     |
| viuli laia               | 0 <del>-4</del><br>  4-7 |                          | 5-25                                              | 4.5-5.0                           |
|                          | 7-23                     | <br>                     | 2-8                                               | 5.1-5.5                           |
|                          | 23-60                    |                          |                                                   | 5.1-6.0                           |
| 18:                      |                          |                          | <br>                                              |                                   |
| Mutnala                  | 0-4                      |                          | 15-70                                             | 4.0-6.0                           |
|                          | 4-7                      |                          | 5-25                                              | 4.5-5.0                           |
|                          | 7-23                     |                          | 2-8                                               | 5.1-5.5                           |
|                          | 23-60<br>                |                          | <br>                                              | 5.1-6.0<br>                       |
| 19:<br>Mutnala           | <br>  0-4                |                          | 15-70                                             | 4.0-6.0                           |
| watitala                 | 0 <del>-</del><br>  4-7  | <br>                     | 5-25                                              | 4.5-5.0                           |
|                          | 7-23                     |                          | 2-8                                               | 5.1-5.5                           |
|                          | 23-60                    |                          |                                                   | 5.1-6.0                           |
| 20:                      | <br>                     |                          | <br>                                              |                                   |
| Mutnala                  |                          |                          | 15-70                                             | 4.0-6.0                           |
|                          | 4-7                      |                          | 5-25                                              | 4.5-5.0                           |
|                          | 7-23<br>  23-60          |                          | 2-8<br>                                           | 5.1-5.5<br>  5.1-6.0              |
|                          | 23-00                    |                          |                                                   | 5.1-0.0                           |
| 21:<br>Mutnala           | <br>  0-4                |                          | <br>  15-70                                       | 4.0-6.0                           |
|                          | 4-7                      |                          | 5-25                                              | 4.5-5.0                           |
|                          | 7-23                     | j                        | 2-8                                               | 5.1-5.5                           |
|                          | 23-60                    | j                        |                                                   | 5.1-6.0                           |
| 22:                      |                          |                          |                                                   |                                   |
| Mutnala                  | 0-4                      |                          | 15-70                                             | 4.0-6.0                           |
|                          | 4-7                      | l                        | 5-25                                              | 4.5-5.0                           |
|                          |                          | !                        |                                                   | •                                 |
|                          | 7-23<br>23-60            | ļ                        | 2-8                                               | 5.1-5.5                           |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name           | <br> <br>  Depth<br> <br>                     | <br>  Cation<br>  exchange<br>  capacity<br> | Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br> <br>                    |
|------------------------------------|-----------------------------------------------|----------------------------------------------|---------------------------------------------------|------------------------------------------------------|
|                                    | <br>  In.<br>                                 | <br>  meq/100 g                              | <br>  meq/100 g                                   | <br>  pH                                             |
| 623:<br>Mutnala                    | <br>  0-4<br>  4-7<br>  7-23<br>  23-60       | <br> <br> <br>                               | <br>  15-70<br>  5-25<br>  2-8<br>                | <br>  4.0-6.0<br>  4.5-5.0<br>  5.1-5.5<br>  5.1-6.0 |
| Starichkof                         | <br>  0-7<br>  7-60                           | <br> <br>                                    | <br>  20-60<br>  20-60                            | 4.0-5.0<br>  4.0-5.0                                 |
| Slikok                             | <br>  0-13<br>  13-51<br>  51-60              | <br> <br> <br>                               | <br>  25-110<br>  5-15<br>  1-5                   | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5              |
| 624:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| 625:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | <br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5 |
| 626:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| 627:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | <br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5 |
| 628:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | <br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5 |
| 629:<br>Naptowne                   | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br> <br>  2-30                    | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| 630:<br>Naptowne, moderately steep | <br>  0-3<br>  3-14<br>  13-20<br>  20-60     | <br> <br> <br>  2-30                         | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| Naptowne, moderately steep         | <br>  0-3<br>  3-14<br>  13-20<br>  20-60<br> | <br> <br> <br> <br>  2-30                    | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name                 | <br> <br>  Depth<br> <br>                 | Cation exchange capacity       | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                               |
|------------------------------------------|-------------------------------------------|--------------------------------|---------------------------------------------------|------------------------------------------------------|
|                                          | <br>  In.                                 | meq/100 g                      | meq/100 g                                         | <br>  pH                                             |
| 631: Naptowne, moderately steep          | <br>  0-3<br>  3-14<br> 13-20<br> 20-60   | <br> <br> <br>  2-30           | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| Naptowne, gently sloping                 | <br>  0-3<br>  3-14<br>  13-20<br>  20-60 | <br> <br> <br>  2-30           | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | 4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5       |
| 632:<br>Niklason                         | <br>  0-2<br>  2-6<br>  6-23<br>  23-60   | <br> <br> <br>  2-7<br>  2-7   | <br>  15-50<br>  5-25<br>  2-5<br>  1-3           | <br>  4.0-6.0<br>  4.5-6.0<br>  5.1-6.5<br>  5.1-6.5 |
| 633:<br>Nikolaevsk                       | <br>  0-2<br>  2-20<br>  20-60            | <br> <br> <br>  2-8            | <br>  20-60<br>  5-22<br>  1-4                    | <br>  4.0-5.5<br>  4.5-5.5<br>  5.4-6.0              |
| 634:<br>Nikolaevsk                       | <br>  0-2<br>  2-20<br>  20-60            | <br> <br> <br>  2-8            | <br>  20-60<br>  5-22<br>  1-4                    | <br>  4.0-5.5<br>  4.5-5.5<br>  5.4-6.0              |
| 635:<br>Nikolaevsk                       | <br>  0-2<br>  2-20<br>  20-60            | <br> <br> <br>  2-8            | <br>  20-60<br>  5-22<br>  1-4                    | <br>  4.0-5.5<br>  4.5-5.5<br>  5.4-6.0              |
| 636:<br>Nikolai                          | <br>  0-2<br>  2-32<br>  32-41<br>  41-60 | <br> <br> <br>                 | <br>  15-70<br>  25-110<br>  2-5<br>  1-3         | 4.0-6.0<br>  4.0-5.5<br>  4.5-5.5<br>  4.8-6.2       |
| 637:<br>Nikolai, somewhat poorly drained | <br>  0-2<br>  2-32<br>  32-41<br>  41-60 | <br> <br> <br>                 | <br>  15-70<br>  25-110<br>  2-5<br>  1-3         | 4.0-6.0<br>  4.0-5.5<br>  4.5-5.5<br>  4.8-6.2       |
| Tuxedni                                  | <br>  0-2<br>  2-24<br> 24-36<br>  36-60  | <br> <br> <br>  5-20<br>  4-12 | <br>  15-70<br>  5-15<br> <br>                    | <br> 3.5-5.0<br> 4.2-5.5<br> 5.6-6.5<br> 5.6-6.5     |
| 638:<br>Puntilla                         | <br>  0-6<br>  6-10<br>  10-36<br>  36-60 | <br> <br> <br>                 | <br>  20-60<br>  5-15<br>  5-25<br>  2-5          | <br> 3.6-5.5<br> 3.6-5.5<br> 3.6-5.5<br> 4.5-5.5     |
| 639:<br>Puntilla                         | <br>  0-6<br>  6-10<br>  10-36<br>  36-60 | <br> <br> <br>                 | <br>  20-60<br>  5-15<br>  5-25<br>  2-5          | <br>  3.6-5.5<br>  3.6-5.5<br>  3.6-5.5<br>  4.5-5.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name          | <br> <br>  Depth<br> <br>                            | Cation exchange capacity           | Effective<br>  cation<br>  exchange<br>  capacity | <br>  Soil<br>  reaction<br>                                |
|-----------------------------------|------------------------------------------------------|------------------------------------|---------------------------------------------------|-------------------------------------------------------------|
|                                   | <br>  In.                                            | <br>  meq/100 g                    | <br>  meq/100 g                                   | <br>  pH                                                    |
| 640:<br>Qutal                     | <br>  0-3<br>  3-10<br>  10-24<br>  24-48<br>  48-60 | <br> <br> <br>  5-15<br>  2-7      | <br>  15-70<br>  5-15<br>  2-8<br> <br>           | 4.0-6.0<br>  4.5-5.5<br>  4.5-5.5<br>  5.2-6.0<br>  5.5-6.0 |
| 941:<br>Qutal                     | <br>  0-3<br>  3-10<br>  10-24<br>  24-48<br>  48-60 | <br> <br> <br> <br>  5-15<br>  2-7 | <br>  15-70<br>  5-15<br>  2-8<br> <br>           | 4.0-6.0<br>  4.5-5.5<br>  4.5-5.5<br>  5.2-6.0<br>  5.5-6.0 |
| 942:<br>Qutal                     | <br>  0-3<br>  3-10<br>  10-24<br>  24-48<br>  48-60 | <br> <br> <br> <br>  5-15<br>  2-7 | <br>  15-70<br>  5-15<br>  2-8<br> <br>           | 4.0-6.0<br>  4.5-5.5<br>  4.5-5.5<br>  5.2-6.0<br>  5.5-6.0 |
| 643:<br>Redoubt, terraces         | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br> 4.0-5.0<br> 4.0-5.7<br> 4.5-5.7                        |
| 644:<br>Redoubt                   | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br>  4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                     |
| 645:<br>Redoubt                   | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br>  4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                     |
| 646:<br>Redoubt, cool             | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br>  4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                     |
| 647:<br>Redoubt, moderately steep | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br>  4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                     |
| Redoubt, gently sloping           | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | 4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                           |
| 648:<br>Redoubt, cool             | <br>  0-2<br>  2-22<br>  22-60                       | <br> <br> <br>  2-9                | <br>  15-70<br>  5-23<br>  1-5                    | <br>  4.0-5.0<br>  4.0-5.7<br>  4.5-5.7                     |
| Tuxedni                           | <br>  0-2<br>  2-24<br> 24-36<br>  36-60             | <br> <br> <br>  5-20<br>  4-12     | <br>  15-70<br>  5-15<br> <br>                    | 3.5-5.0<br>  4.2-5.5<br>  5.6-6.5<br>  5.6-6.5              |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                          | Cation exchange capacity             | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                                      |
|--------------------------|----------------------------------------------------|--------------------------------------|---------------------------------------------------|-------------------------------------------------------------|
|                          | <br>  In.                                          | meq/100 g                            | meq/100 g                                         | <br>  pH                                                    |
| 649:<br>Riverwash        | <br>                                               |                                      |                                                   |                                                             |
| 650:<br>Salamatof        | <br> <br>  0-4<br>  4-60                           | <br> <br> <br>                       | <br>  20-60<br>  20-60                            | 3.0-5.0<br>3.0-5.0                                          |
| Doroshin                 | <br>  0-36<br>  36-60                              | <br> <br>                            | <br>  15-70<br>                                   | <br>  4.0-6.0<br>  4.5-5.5                                  |
| 651:<br>Salamatof        | <br> <br>  0-4<br>  4-60                           | <br> <br> <br>                       | <br>  20-60<br>  20-60                            | <br> 3.0-5.0<br> 3.0-5.0                                    |
| 652:<br>Slikok           | <br> <br>  0-13<br>  13-51<br>  51-60              | <br> <br>                            | <br>  25-110<br>  5-15<br>  1-5                   | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5                     |
| 653:<br>Slikok           | <br>  0-13<br>  13-51<br>  51-60                   | <br> <br> <br>                       | <br>  25-110<br>  5-15<br>  1-5                   | <br>  4.0-5.5<br>  5.1-5.5<br>  5.1-5.5                     |
| 654:<br>Smithfha         | <br>  0-3<br>  3-4<br>  4-18<br>  18-60            | <br> <br>  10-20<br>  10-20<br>  1-5 | <br>  15-25<br> <br> <br>                         | <br>  4.5-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-6.5        |
| 655:<br>Smithfha         | <br>  0-3<br>  3-4<br>  4-18<br>  18-60            | <br> <br>  10-20<br>  10-20<br>  1-5 | <br>  15-25<br> <br> <br>                         | <br>  4.5-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-6.5        |
| 656:<br>Smokey Bay       | <br>  0-2<br>  2-9<br>  9-55<br>  55-60            | <br> <br>  20-50<br>  5-15<br>  5-15 | <br>  25-110<br> <br> <br>                        | <br>  4.0-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-7.0        |
| 657:<br>Smokey Bay       | <br>  0-2<br>  2-9<br>  9-55<br>  55-60            | <br> <br>  20-50<br>  5-15<br>  5-15 | <br>  25-110<br> <br> <br>                        | <br>  4.0-5.5<br>  5.6-6.5<br>  5.6-6.5<br>  5.6-7.0        |
| 658:<br>Snowdance        | <br>  0-3<br>  3-8<br>  8-24<br>  24-60            | <br> <br> <br>  4-15                 | <br>  20-60<br>  5-15<br>  5-10<br>  2-5          | <br>  4.0-5.5<br>  4.5-5.5<br>  4.5-5.5<br>  5.1-6.0        |
| 659:<br>Soldotna         | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9   | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3 | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name           | <br> <br>  Depth<br>                               | Cation exchange capacity           | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil   reaction                                                   |
|------------------------------------|----------------------------------------------------|------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|
|                                    | In.                                                | meq/100 g                          | meq/100 g                                               | pH                                                                |
| 660:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br>  5-15<br>  2-9      | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 661:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 662:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 663:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 664:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br>  5-15<br>  2-9      | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 665:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| 666:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | <br>  4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5 |
| 667: Soldotna, strongly sloping    | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| Soldotna, gently sloping           | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9 | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | <br> 4.0-5.0<br> 4.5-5.7<br> 4.5-5.7<br> 5.0-6.0<br> 5.3-6.5      |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name           | <br> <br>  Depth<br> <br>                          | Cation cxchange capacity             | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction                                                     |
|------------------------------------|----------------------------------------------------|--------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|
|                                    | <br>  In.                                          |                                      |                                                         | <br>  pH                                                          |
| 668:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9   | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
|                                    | 0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60       | <br> <br>  4-20<br>  4-15<br>  10-33 | 15-70<br>  5-15<br> <br>                                | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0       |
| 669:<br>Soldotna, sandy substratum | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br>  5-15<br>  2-9        | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| Kenai                              | <br>  0-2<br>  2-6<br>  6-19<br>  19-24<br>  25-60 | <br> <br>  4-20<br>  4-15<br>  10-33 | <br>  15-70<br>  5-15<br> <br>                          | 4.0-6.0<br>  4.3-5.5<br>  4.8-6.0<br>  5.5-6.5<br>  6.0-7.0       |
| 670:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9   | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | <br>  4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5 |
| Kichatna                           | <br>  0-2<br>  2-4<br>  4-11<br> 11-14<br>  14-60  | <br> <br> <br>  4-8<br>  3-5         | <br>  15-25<br>  5-15<br>  5-15<br> <br>                | <br>  4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |
| 671:<br>Soldotna                   | <br>  0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br> <br>  5-15<br>  2-9   | <br>  15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5       |
| Kichatna                           | <br>  0-2<br>  2-4<br>  4-11<br>  11-14<br>  14-60 | <br> <br> <br> <br>  4-8<br>  3-5    | <br>  15-25<br>  5-15<br>  5-15<br> <br>                | <br>  4.0-5.5<br>  5.1-6.0<br>  5.1-6.0<br>  5.6-6.0<br>  5.6-6.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name     | <br> <br>  Depth<br> <br>                    | Cation exchange capacity      | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                                      |
|------------------------------|----------------------------------------------|-------------------------------|---------------------------------------------------|-------------------------------------------------------------|
| 070.                         | <br>  In.                                    | <br>  meq/100 g               | meq/100 g                                         | <br>  pH                                                    |
| 672:<br>Soldotna             | 0-4<br>  4-7<br>  7-22<br>  22-29<br>  29-60 | <br> <br> <br>  5-15<br>  2-9 | 15-70<br>  3-15<br>  3-15<br>  3-7<br>  1-3       | 4.0-5.0<br>  4.5-5.7<br>  4.5-5.7<br>  5.0-6.0<br>  5.3-6.5 |
| Nikolai                      | <br>  0-2<br>  2-32<br>  32-41<br>  41-60    | <br> <br> <br>                | <br>  15-70<br>  25-110<br>  2-5<br>  1-3         | <br>  4.0-6.0<br>  4.0-5.5<br>  4.5-5.5<br>  4.8-6.2        |
| 673:<br>Spenard              |                                              |                               |                                                   | 14050                                                       |
| Spenara                      | 0-9<br>  9-14<br> 14-25<br> 25-60            | <br> <br> <br>                | 20-60<br>  5-15<br>  2-10<br>  1-8                | 4.0-5.0<br>  4.5-5.5<br>  4.5-5.8<br>  4.5-5.8              |
| 674:<br>Spenard              | <br>  0-9<br>  9-14<br>  14-25<br>  25-60    | <br> <br> <br>                | 20-60<br>  5-15<br>  2-10<br>  1-8                | <br>  4.0-5.0<br>  4.5-5.5<br>  4.5-5.8<br>  4.5-5.8        |
| 675:<br>Spenard              | <br>  0-9<br>  9-14<br> 14-25<br> 25-60      | <br> <br> <br>                | <br>  20-60<br>  5-15<br>  2-10<br>  1-8          | <br>  4.0-5.0<br>  4.5-5.5<br>  4.5-5.8<br>  4.5-5.8        |
| 676:<br>Starichkof           | <br>  0-7<br>  7-60                          | <br> <br>                     | <br>  20-60<br>  20-60                            | <br>  4.0-5.0<br>  4.0-5.0                                  |
| Doroshin                     | <br>  0-36<br>  36-60                        | <br> <br>                     | <br>  15-70<br>                                   | 4.0-6.0<br>  4.5-5.5                                        |
| 677:<br>Starichkof           | <br>  0-7<br>  7-60                          | <br> <br>                     | <br>  20-60<br>  20-60                            | <br>  4.0-5.0<br>  4.0-5.0                                  |
| 678:<br>Starichkof           | <br>  0-7<br>  7-60                          | <br> <br>                     | <br>  20-60<br>  20-60                            | <br>  4.0-5.0<br>  4.0-5.0                                  |
| 679:<br>Starichkof, forested | <br>  0-7<br>  7-60                          | <br> <br>                     | <br>  20-60<br>  20-60                            | <br>  4.0-5.0<br>  4.0-5.0                                  |
| 680:<br>Starichkof           | <br>  0-7<br>  7-60                          | <br> <br>                     | <br>  20-60<br>  20-60                            | 4.0-5.0                                                     |
| Slikok                       | <br>  0-13<br>  13-51<br>  51-60             | <br> <br>                     | <br>  25-110<br>  5-15<br>  1-5                   | 4.0-5.5<br>  5.1-5.5<br>  5.1-5.5                           |
| Naptowne                     | <br>  0-3<br>  3-14<br>  13-20<br>  20-60    | <br> <br> <br>  2-30          | <br>  15-50<br>  3-15<br>  3-15<br>  2-15         | <br>  4.0-6.0<br>  4.0-6.0<br>  4.5-6.5<br>  5.3-6.5        |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name     | <br>  Depth<br>                                    | Cation exchange capacity          | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                                            |
|------------------------------|----------------------------------------------------|-----------------------------------|---------------------------------------------------|-------------------------------------------------------------------|
|                              | <br>  In.<br>                                      | <br>  meq/100 g                   | meq/100 g                                         | <br>  pH                                                          |
| 681:<br>Starichkof           | <br>  0-7<br>  7-60                                | <br> <br>                         | <br>  20-60<br>  20-60                            | 4.0-5.0                                                           |
| Spenard                      | <br>  0-9<br>  9-14<br> 14-25<br> 25-60            | <br> <br> <br>                    | 20-60<br>  5-15<br>  2-10<br>  1-8                | 4.0-5.0<br>  4.5-5.5<br>  4.5-5.8<br>  4.5-5.8                    |
| 682:<br>Susitna              | <br>  0-2<br>  2-3<br>  3-45<br>  45-60            | <br> <br> <br>  4-9<br>  2-8      | <br>  15-70<br>  8-20<br>  2-5<br>  1-3           | <br>  4.0-6.0<br>  4.5-5.5<br>  5.1-6.0<br>  5.1-6.0              |
| Riverwash                    | <br>                                               | <br>                              |                                                   |                                                                   |
| 683:<br>Susitna              | <br>  0-2<br>  2-3<br>  3-45<br>  45-60            | <br> <br> <br>  4-9<br>  2-8      | <br>  15-70<br>  8-20<br>  2-5<br>  1-3           | <br>  4.0-6.0<br>  4.5-5.5<br>  5.1-6.0<br>  5.1-6.0              |
| 684:<br>Talkeetna            | <br>  0-2<br>  2-7<br>  7-19<br>  19-60            | <br> <br> <br>                    | <br>  15-60<br>  5-25<br>  20-30<br>  1-5         | 4.0-5.5<br>  3.6-5.0<br>  3.6-5.0<br>  4.5-6.0                    |
| 685:<br>Talkeetna            | <br>  0-2<br>  2-7<br>  7-19<br>  19-60            | <br> <br> <br>                    | <br>  15-60<br>  5-25<br>  20-30<br>  1-5         | 4.0-5.5<br>  3.6-5.0<br>  3.6-5.0<br>  4.5-6.0                    |
| 686:<br>Talkeetna            | <br>  0-2<br>  2-7<br>  7-19<br>  19-60            | <br> <br> <br>                    | <br>  15-60<br>  5-25<br>  20-30<br>  1-5         | <br>  4.0-5.5<br>  3.6-5.0<br>  3.6-5.0<br>  4.5-6.0              |
| Starichkof                   | <br>  0-7<br>  7-60                                | <br> <br>                         | <br>  20-60<br>  20-60                            | <br>  4.0-5.0<br>  4.0-5.0                                        |
| 687:<br>Tangerra             | <br>  0-4<br>  4-8<br>  8-16<br>  16-46<br>  46-60 | <br> <br> <br> <br>  2-7<br>  2-7 | <br>  15-50<br>  5-15<br>  3-5<br> <br>           | <br>  4.0-5.0<br>  4.2-5.5<br>  4.2-5.5<br>  5.6-6.8<br>  5.6-6.8 |
| 688:<br>Beaches, tidal flats | <br> <br>                                          |                                   |                                                   |                                                                   |
| 689:<br>Tlikakila            | <br>  0-1<br>  1-19<br>  19-34<br>  34-60          | <br> <br> <br>                    | <br>  15-50<br>  5-15<br>  2-9<br>  2-9           | <br>  3.5-5.0<br>  4.0-5.0<br>  4.0-5.5<br>  4.5-5.5              |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                   | Cation exchange capacity | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br> <br>                          |
|--------------------------|---------------------------------------------|--------------------------|---------------------------------------------------|------------------------------------------------------|
|                          | <br>  In.<br>                               | meq/100 g                | meq/100 g                                         | pH                                                   |
| 690:<br>Tlikakila        | <br>  0-1<br>  1-19<br>  19-34<br>  34-60   | <br> <br> <br>           | <br>  15-50<br>  5-15<br>  2-9<br>  2-9           | 3.5-5.0<br>  4.0-5.0<br>  4.0-5.5<br>  4.5-5.5       |
| 691:<br>Tlikakila        | <br>  0-1<br>  1-19<br>  19-34<br>  34-60   | <br> <br> <br>           | <br>  15-50<br>  5-15<br>  2-9<br>  2-9           | <br>  3.5-5.0<br>  4.0-5.0<br>  4.0-5.5<br>  4.5-5.5 |
| 692:<br>Tokositna        | <br>  0-2<br>  2-13<br>  13-24<br>  24-60   | <br> <br> <br>  2-7      | <br>  20-60<br>  5-25<br>  2-8<br>                | <br>  4.0-5.5<br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.5 |
| 693:<br>Tokositna        | <br>  0-2<br>  2-13<br>  13-24<br>  24-60   | <br> <br> <br>  2-7      | <br>  20-60<br>  5-25<br>  2-8<br>                | 4.0-5.5<br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.5       |
| 694:<br>Tokositna        | <br>  0-2<br>  2-13<br> 13-24<br> 24-60     | <br> <br> <br>  2-7      | <br>  20-60<br>  5-25<br>  2-8<br>                | <br>  4.0-5.5<br>  4.0-6.0<br>  4.5-6.0<br>  5.6-6.5 |
| 695:<br>Truuli           | <br>  0-9<br>  9-19<br>  19-43<br>  43-60   | <br> <br> <br>  5-15     | <br>  10-60<br>  5-15<br>  3-10<br>  2-5          | <br>  3.5-5.5<br>  3.5-5.5<br>  3.5-6.0              |
| 696:<br>Tutka            | <br>  0-7<br>  7-13<br>  13-21<br>  21-60   | <br> <br> <br>           | <br>  15-50<br>  5-25<br>  8-25<br>               | <br>  4.0-5.5<br>  4.2-5.5<br>  4.2-5.5<br>          |
| Kasitsna                 | <br>  0-3<br>  3-18<br>  18-31<br>  31-60   | <br> <br> <br> <br>  2-7 | <br>  15-70<br>  5-22<br>  2-8<br>                | 4.0-6.0<br>  4.5-6.0<br>  4.5-5.5<br>  5.6-6.0       |
| Rock outcrop             | <br> <br>                                   | <br> <br>                | <br> <br>                                         | <br>                                                 |
| 697:<br>Tutka            | <br>  0-7<br>  7-13<br>  13-21<br>  21-60   | <br> <br> <br>           | <br>  15-50<br>  5-25<br>  8-25<br>               | <br>  4.0-5.5<br>  4.2-5.5<br>  4.2-5.5<br>          |
| Portgraham               | <br>  0-2<br>  2-4<br>  4-27<br>  27-60<br> | <br> <br> <br>           | <br>  20-60<br>  5-15<br>  5-25<br>               | <br>  4.0-5.5<br>  4.0-5.0<br>  4.5-6.0<br>          |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br>                 | Cation exchange capacity         | Effective<br>  cation<br>  exchange<br>  capacity | Soil<br>  reaction<br>                               |
|--------------------------|-------------------------------------------|----------------------------------|---------------------------------------------------|------------------------------------------------------|
|                          | <br>  In.                                 | meq/100 g                        | meq/100 g                                         | pH                                                   |
| 698:<br>Tuxedni          | <br>  0-2<br>  2-24<br>  24-36<br>  36-60 | <br> <br>  5-20<br>  4-12        | <br>  15-70<br>  5-15<br> <br>                    | 3.5-5.0<br>  4.2-5.5<br>  5.6-6.5<br>  5.6-6.5       |
| 699:<br>Tuxedni          | <br>  0-2<br>  2-24<br> 24-36<br> 36-60   | <br> <br> <br>  5-20<br>  4-12   | <br>  15-70<br>  5-15<br> <br>                    | <br> 3.5-5.0<br> 4.2-5.5<br> 5.6-6.5<br> 5.6-6.5     |
| 700:<br>Tuxedni, warm    | <br>  0-2<br>  2-24<br> 24-36<br> 36-60   | <br> <br> <br>  5-20<br>  4-12   | <br>  15-70<br>  5-15<br> <br>                    | <br> 3.5-5.0<br> 4.2-5.5<br> 5.6-6.5<br> 5.6-6.5     |
| 701: Typic Cryaquents    | <br>  0-2<br>  2-6<br>  6-60              | <br>  50-150<br>  5-30<br>  2-20 | <br> <br> <br>                                    | <br> 6.0-7.0<br> 6.6-8.4<br> 7.4-8.4                 |
| 702: Typic Cryopsamments | <br> <br>  0-60<br>                       | <br> <br>  1-5                   | <br> <br>                                         | 6.1-7.3                                              |
| 703: Typic Cryorthents   | <br>  0-1<br>  1-33<br>  33-60            | <br> <br>                        | <br>  20-60<br>  3-15<br>  3-15                   | <br>  4.0-5.5<br>  4.8-7.3<br>  4.8-8.0              |
| 704:<br>Urban land       | <br> <br>                                 |                                  | <br> <br>                                         |                                                      |
| 705:<br>Water, fresh     | <br> <br>                                 |                                  | <br> <br>                                         |                                                      |
| 706: Whitsol             | <br>  0-3<br>  3-29<br> 29-51<br> 51-60   | <br> <br> <br>                   | <br>  10-30<br>  5-15<br>  2-8<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  5.1-6.5<br>  5.1-6.5 |
| 707: Whitsol             | <br>  0-3<br>  3-29<br> 29-51<br> 51-60   | <br> <br> <br>                   | <br>  10-30<br>  5-15<br>  2-8<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  5.1-6.5<br>  5.1-6.5 |
| 708:<br>Whitsol          | <br>  0-3<br>  3-29<br> 29-51<br> 51-60   | <br> <br> <br>                   | <br>  10-30<br>  5-15<br>  2-8<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  5.1-6.5<br>  5.1-6.5 |
| 709:<br>Whitsol          | <br>  0-3<br>  3-29<br> 29-51<br> 51-60   | <br> <br> <br>                   | <br>  10-30<br>  5-15<br>  2-8<br>  1-3           | <br>  4.0-5.5<br>  4.5-6.0<br>  5.1-6.5<br>  5.1-6.5 |

Table 11. Chemical Properties of the Soils—Continued

| Map symbol and soil name | <br> <br>  Depth<br> <br> | Cation exchange capacity | <br>  Effective<br>  cation<br>  exchange<br>  capacity | Soil reaction |
|--------------------------|---------------------------|--------------------------|---------------------------------------------------------|---------------|
|                          | <br>  In.                 | <br>  meq/100 g          | <br>  meq/100 g                                         | <br>  pH      |
| 710:                     | <br> -                    |                          |                                                         |               |
| Whitsol                  | l<br>l 0-3                | i                        | 10-30                                                   | 4.0-5.5       |
|                          | 3-29                      | i                        | 5-15                                                    | 4.5-6.0       |
|                          | 29-51                     | j                        | 2-8                                                     | 5.1-6.5       |
|                          | 51-60                     | ļ                        | 1-3                                                     | 5.1-6.5       |
| 711:                     | <br>                      | <br>                     | <br>                                                    |               |
| Whitsol                  | 0-3                       |                          | 10-30                                                   | 4.0-5.5       |
|                          | 3-29                      | j                        | 5-15                                                    | 4.5-6.0       |
|                          | 29-51                     | j                        | 2-8                                                     | 5.1-6.5       |
|                          | 51-60                     |                          | 1-3                                                     | 5.1-6.5       |
| Doroshin                 | l<br>l 0-36               | <br>                     | <br>  15-70                                             | <br>  4.0-6.0 |
|                          | 36-60                     | j                        |                                                         | 4.5-5.5       |
|                          | <br>                      | <br>                     | <br>                                                    | <u></u>       |

## **Table 12. Water Features**

(See text for definitions of terms used in this table. Upper limit, Lower limit, and Surface water depth are in feet. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

|                                  | <br> <br>                        | <br>                                      | We                | t soil               |                                         | P              | onding    |                                     | Flooding                          |                                                    |
|----------------------------------|----------------------------------|-------------------------------------------|-------------------|----------------------|-----------------------------------------|----------------|-----------|-------------------------------------|-----------------------------------|----------------------------------------------------|
| Map symbol<br>and soil name      | l<br> Hydro-<br> logic<br> group | <br>  Month<br> <br>                      | Upper limit       | Lower<br>  limit<br> | Water<br>  table<br>  kind              |                | Duration  | Frequency<br> <br>                  | Duration                          | Frequency<br> <br>                                 |
|                                  | <br> <br>                        |                                           | Ft.               | <br>  Ft.            | <br> <br>                               | Ft.            |           | <br> <br>                           | <br> <br>                         | <br> <br>                                          |
| 501:<br>Aquic Cryofluvents       | <br> <br>  C<br>                 | <br> Apr-May<br> Jun-Jul<br> Aug-Sep      | j                 | j                    | <br> Apparent<br> <br> Apparent         | <br> <br>      | <br><br>  | <br>  None<br>  None<br>  None      | <br>  Brief<br>  Brief<br>  Brief | <br> Occasional<br> Occasional<br> Occasional      |
| 502: Aquic Cryofluvents, shallow | <br> <br> C<br> <br>             | <br> <br> Apr-May<br> Jun-Jul<br> Aug-Sep | j                 | j                    | <br> <br> Apparent<br> <br> Apparent    | <br> <br> <br> | <br> <br> | <br> <br>  None<br>  None<br>  None | Brief Brief Brief                 | <br> <br> Occasional<br> Occasional<br> Occasional |
| 503:<br>Badland, sea cliffs      | <br> <br>                        | <br> <br> Apr-Sep                         | <br> <br>         |                      | <br> <br>                               |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| 504:<br>Badland, sea cliffs      | <br> <br>                        | <br> <br> Apr-Sep                         | <br> <br>         |                      | <br> <br>                               |                |           | <br> <br>  None                     |                                   | <br> <br>  None                                    |
| Typic Cryorthents                | <br>  В                          | <br> Apr-Sep                              |                   |                      | <br>                                    |                |           | <br>  None                          |                                   | <br>  None                                         |
| 505:<br>Beaches                  | <br> <br> <br>                   | <br> <br> Apr-Sep<br>                     | <br> <br> <br>    | <br> <br> <br>       | <br> <br> <br>                          |                |           | <br> <br>  None<br>                 | <br> <br> Very brief<br>          | <br> <br>  Very<br>  frequent                      |
| 506:<br>Beluga                   | <br> <br>  D<br>                 | <br> Apr-May<br> Jun-Aug<br>  Sep         | 0.5-2.0           | 5.0-5.0              | <br> Apparent<br> Apparent<br> Apparent |                | <br><br>  | <br>  Rare<br>  Rare<br>  Rare      | <br> <br> <br>                    | None None None                                     |
| 507:<br>Beluga                   | <br> <br>  D                     | <br> <br> Apr-Sep                         | <br> <br> 0.5-2.0 | <br> -<br> 5.0-5.0   | <br> <br> Apparent                      |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| 508:<br>Beluga                   | <br> <br>  D                     | <br> <br> Apr-Sep                         | <br> <br> 0.5-2.0 | 5.0-5.0              | <br> <br> Apparent                      |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| 509:<br>Beluga                   | <br> <br>  D                     | <br> <br> Apr-Sep                         | <br> <br> 0.5-2.0 | 5.0-5.0              | <br> <br> Apparent                      |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| Mutnala                          | <br>  В                          | <br> Apr-Sep                              |                   |                      | <br>                                    |                |           | <br>  None                          | <br>                              | None                                               |
| 510:<br>Beluga                   | <br> <br>  D                     | <br> <br> Apr-Sep                         | <br> <br> 0.5-2.0 | 5.0-5.0              | <br> <br> Apparent                      |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| Smokey Bay                       | C                                | Apr-Sep                                   | 0.5-2.0           | 5.0-5.0              | <br> Apparent                           |                |           | <br>  None                          | <br>                              | <br>  None                                         |
| 511:<br>Beluga                   | <br> <br>  D                     | <br> <br> Apr-Sep                         | <br> <br> 0.5-2.0 | 5.0-5.0              | <br> <br> Apparent                      |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| Smokey Bay                       | c                                | <br> Apr-Sep                              | 0.5-2.0           | 5.0-5.0              | <br> Apparent                           |                |           | <br>  None                          |                                   | <br>  None                                         |
| 512:<br>Benka                    | <br> <br>  B                     | <br> <br> Apr-Sep                         | <br> <br>         |                      | <br> <br>                               |                |           | <br> <br>  None                     | <br> <br>                         | <br> <br>  None                                    |
| 513:<br>Benka                    | <br> <br>  B<br>                 | <br> <br> Apr-Sep<br>                     | <br> <br> <br>    | <br> <br>            | <br> <br> <br>                          |                |           | <br> <br>  None<br>                 | <br> <br> <br>                    | <br> <br>  None<br>                                |

Table 12. Water Features—Continued

|                                          | <br>[                           |                       | We                    | t soil                |                            | Ponding                             |          |                     | Flooding                |                      |
|------------------------------------------|---------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|-------------------------------------|----------|---------------------|-------------------------|----------------------|
| Map symbol<br>and soil name              | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>  | Upper limit           | Lower<br>  limit<br>  | Water<br>  table<br>  kind | <br> Surface <br>  water<br>  depth | Duration | Frequency           | <br>  Duration<br> <br> | Frequency            |
|                                          | <br> <br>                       |                       | <br>  Ft.             | <br>  Ft.             | <br> <br>                  | <br>  Ft.                           |          |                     | <br> <br>               |                      |
| 514:<br>Benka                            | <br> <br>  B<br>                | <br> <br> Apr-Sep     | <br> <br>             |                       | <br> <br>                  | <br> <br>                           |          | <br> <br>  None     | <br> <br> <br>          | <br> <br>  None      |
| 515:<br>Benka                            | <br>  В<br>                     | <br> Apr-Sep<br>      | <br> <br>             |                       | <br> <br>                  | <br>   <br>                         |          | <br>  None<br>      | <br> <br>               | <br>  None<br>       |
| 516:<br>Benka                            | <br>  B<br>                     | <br> Apr-Sep<br>      | <br> <br>             |                       | <br> <br>                  | <br>   <br>                         |          | <br>  None<br>      | <br> <br>               | <br>  None           |
| 517:<br>Benka, strongly sloping          | <br>  В<br>                     | <br> Apr-Sep<br>      | <br> <br>             |                       | <br> <br>                  | <br>                                |          | <br>  None<br>      | <br> <br>               | <br>  None<br>       |
| Benka, gently sloping                    | В                               | Apr-Sep               | ļ                     | ļ                     | <br>                       | ļ į                                 |          | None                | <br>                    | None                 |
| 518:<br>Boxcar                           | <br> <br>  B<br>                | <br> <br> Apr-Sep     | <br> <br>             | <br>                  | <br> <br> <br>             | <br> <br>                           |          | <br>  None<br>      | <br> <br> <br>          | <br> <br>  None      |
| 519:<br>Boxcar                           | <br>  B<br>                     | <br> Apr-Sep          | <br> <br>             |                       | <br> <br>                  | <br>                                |          | <br>  None<br>      | <br> <br>               | <br>  None           |
| 520:<br>Boxcar                           | <br>  B                         | <br> Apr-Sep          | <br> <br>             |                       | <br>                       | <br>                                |          | <br>  None          | <br> <br> <br>          | <br>  None           |
| 521:<br>Boxcar, cool                     | <br> <br>  B                    | <br> Apr-Sep          | <br>                  |                       | <br>                       | <br>                                |          | <br>  None          | <br>                    | <br>  None           |
| 522:<br>Boxcar, cool                     | <br> <br>  B                    | <br> Apr-Sep          | <br>                  |                       | <br> <br>                  | <br>                                |          | <br>  None          | <br>                    | <br>  None           |
| 523:<br>Chenega                          | <br> <br>  A                    | <br> Apr-Sep          | <br> <br>             |                       | <br> <br>                  | <br> <br>                           |          | <br> <br>  None     | <br> <br>  Brief        | <br> <br>  Frequent  |
| 524:<br>Chenega, cool                    | <br> <br>  A                    | <br> <br> Apr-Sep     | <br> <br>             |                       | <br> <br>                  |                                     |          | <br> <br>  None     | <br> <br>  Brief        | <br> <br>  Frequent  |
| 525:<br>Chenega, occasionally<br>flooded | <br> <br>  A                    | <br> <br> Apr-Sep     | <br> <br> <br>        |                       | <br> <br>                  | <br> <br> <br>                      |          | <br> <br>  None     | <br> <br> <br>  Brief   | <br> <br> Occasional |
| 526:<br>Chulitna                         | <br> <br>  B                    | <br> Apr-Sep          | <br> <br>             |                       | <br> <br>                  | <br> <br>                           |          | <br>  None          | <br> <br>               | <br> <br>  None      |
| 527:<br>Chulitna                         | <br> <br>  B                    | <br> <br> Apr-Sep     | <br> <br>             |                       | <br> <br>                  | <br>                                |          | <br> <br>  None     | <br> <br>               | <br> <br>  None      |
| 528:<br>Chulitna                         | <br> <br>  B                    | <br> <br> Apr-Sep     | <br> <br>             |                       | <br> <br>                  | <br>                                |          | <br> <br>  None     | <br> <br>               | <br> <br>  None      |
| 529:<br>Chulitna                         | <br> <br>  B                    | <br> <br> Apr-Sep     | <br> <br>             |                       | <br> <br>                  | <br> <br>                           |          | <br> <br>  None     | <br> <br>               | <br> <br>  None      |
| 530:<br>Chunilna                         | D                               | <br> <br> Apr-Sep     | <br> <br> 0.0-1.5     | 5.0-5.0               | <br> <br> Apparent         | <br> <br>                           |          | <br> <br>  None     | <br> <br>               | <br> <br>  None      |
| 531:<br>Chunilna                         | <br> <br>  D<br>                | <br> <br> Apr-Sep<br> | <br> <br> 0.0-1.5<br> | <br> <br> 5.0-5.0<br> | <br> <br> Apparent<br>     | <br> <br>                           |          | <br> <br>  None<br> | <br> <br> <br>          | <br> <br>  None<br>  |

Table 12. Water Features—Continued

|                             | <br>[                           | <u> </u>              | We                         | t soil               |                                         | Ponding |          |                           | Flooding                |                     |
|-----------------------------|---------------------------------|-----------------------|----------------------------|----------------------|-----------------------------------------|---------|----------|---------------------------|-------------------------|---------------------|
| Map symbol<br>and soil name | <br> Hydro-<br> logic<br> group | <br>  Month<br>       | <br>  Upper<br>  limit<br> | Lower<br>  limit<br> | Water<br>  table<br>  kind              |         | Duration | Frequency                 | <br>  Duration<br> <br> | Frequency           |
|                             | <br>                            |                       | <br>  Ft.                  | <br>  Ft.            | <br>                                    | Ft.     |          | <br>                      | <br>                    | <br>                |
| 532:<br>Chunilna, cool      | <br> <br>  D<br>                | <br> <br> Apr-Sep<br> | <br> <br> 0.0-1.5<br>      | <br> -<br> 5.0-5.0   | <br> <br> Apparent<br>                  |         |          | <br> <br>  None<br>       | <br> <br> <br>          | <br> <br>  None<br> |
| 533:<br>Chunilna, cool      | ј<br>  D<br>                    | <br> Apr-Sep<br>      | <br> 0.0-2.3<br>           | <br> 5.0-5.0         | <br> Apparent<br>                       |         |          | <br>  None<br>            | <br> <br>               | <br>  None<br>      |
| 534:<br>Clam Gulch          | <br>  D<br> <br>                | Jun-Aug               | 0.0-1.0                    | 5.0-5.0              | <br> Apparent<br> Apparent<br> Apparent | j j     | <br><br> | <br>  Rare<br> <br>  Rare | <br> <br>               | None None None      |
| 535:<br>Clunie              | <br> <br>  D                    | <br> <br> Apr-Sep     | <br> <br>  0.0             | <br> 5.0-6.0         | <br> <br> Apparent<br>                  | 0.0-1.0 | Long     | <br> <br>  Frequent<br>   | I<br> <br>  Brief<br>   | <br> <br>  Frequent |
| 536:<br>Coal Creek          | D D                             | <br> <br> Apr-Sep     | 0.5-2.0                    | 5.0-6.0              | <br> <br> Apparent<br>                  |         |          | <br> <br>  None<br>       | <br> <br>  Brief<br>    | <br>  Rare          |
| 537:<br>Coal Creek          | D<br>D                          | <br> Apr-Sep          | 0.5-2.0                    | 5.0-6.0              | <br> <br> Apparent<br>                  |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 538:<br>Coal Creek          | D D                             | <br> <br> Apr-Sep     | 0.5-2.0                    | 5.0-6.0              | <br> <br> Apparent<br>                  |         |          | <br> <br>  None<br>       | <br> <br> <br>          | <br>  None          |
| 539:<br>Cohoe               | <br> <br>  B                    | <br> <br> Apr-Sep     | <br>                       |                      | <br>                                    |         |          | <br> <br>  None<br>       | <br> <br>               | <br>  None          |
| 540:<br>Cohoe               | <br> <br>  B                    | <br> <br> Apr-Sep     | <br> <br>                  |                      | <br> <br>                               |         |          | <br> <br>  None<br>       | <br> <br> <br>          | <br>  None          |
| 541:<br>Cohoe               | <br> <br>  B                    | <br> <br> Apr-Sep     | <br>                       |                      | <br>                                    |         |          | <br> <br>  None<br>       | <br> <br>               | <br>  None          |
| 542:<br>Cohoe               | <br>  B<br>                     | <br> Apr-Sep          | <br>                       |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br> <br>          | <br>  None          |
| 543:<br>Cohoe               | <br>  B<br>                     | <br> Apr-Sep          | <br> <br>                  |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 544:<br>Cohoe               | і<br>  В<br>                    | <br> Apr-Sep          | <br> <br>                  |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 545:<br>Cohoe, dry          | <br>  В<br>                     | <br> Apr-Sep          | <br> <br>                  |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 546:<br>Cohoe, dry          | <br>  В<br>                     | <br> Apr-Sep          | <br> <br>                  |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 547:<br>Cohoe, dry          | <br>  В<br>                     | <br> Apr-Sep          | <br>                       |                      | <br> <br>                               |         |          | <br>  None<br>            | <br> <br>               | <br>  None          |
| 548:<br>Cohoe, dry          | і<br> <br>  В                   | <br> <br> Apr-Sep     | <br> <br>                  |                      | <br> <br>                               |         |          | <br> <br>  None<br>       | <br> <br>               | <br>  None<br>      |
| 549:<br>Cohoe, dry          | <br> <br>  B<br>                | <br> <br> Apr-Sep     | <br>                       |                      | <br>                                    |         |          | <br> <br>  None<br>       | <br> <br>               | <br>  None          |
| 550:<br>Cohoe, dry          | <br> <br>  B<br>                | <br> <br> Apr-Sep<br> | <br> <br>                  |                      | <br> <br>                               |         |          | <br> <br>  None<br>       | <br> <br> <br>          | <br>  None<br>      |

Table 12. Water Features—Continued

|                                         |                                 |                              | We                         | t soil                   |                                         | Ponding                             |                |                      | Flooding                |                      |
|-----------------------------------------|---------------------------------|------------------------------|----------------------------|--------------------------|-----------------------------------------|-------------------------------------|----------------|----------------------|-------------------------|----------------------|
| Map symbol<br>and soil name             | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>         | <br>  Upper<br>  limit<br> | Lower<br>  limit         | Water<br>  table<br>  kind              | <br> Surface <br>  water<br>  depth | Duration       | Frequency            | <br>  Duration<br> <br> | Frequency            |
|                                         |                                 |                              | <br>  Ft.                  | <br>  Ft.                | <br>                                    | <br>  Ft.                           |                | <br>                 | <br>                    |                      |
| 551:<br>Cohoe, moderately<br>steep      | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep       | <br> <br> <br>             |                          | <br> <br> <br>                          | <br> <br> <br>                      | <br> <br> <br> | <br> <br> <br>  None | <br>                    | <br>  None           |
| Cohoe, gently sloping                   | <br>  B                         | <br> Apr-Sep                 |                            |                          | <br>                                    |                                     |                | <br>  None           | <br>                    | <br>  None           |
| 552:<br>Cohoe, dry, moderately<br>steep | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep       | <br> <br> <br>             |                          | <br> <br> <br>                          | <br> <br> <br>                      | <br> <br> <br> | <br> <br> <br>  None | <br> <br> <br>          | <br> <br> <br>  None |
| Cohoe, dry, gently sloping              | <br> <br> B                     | <br> Apr-Sep                 | <br> <br>                  |                          | <br> <br>                               |                                     | <br> <br>      | <br> <br>  None      | <br> <br>               | <br>  None           |
| 553:<br>Cohoe, dry                      | <br> <br>  B                    | <br> <br> Apr-Sep            | <br> <br>                  |                          | <br> <br>                               |                                     | <br> <br>      | <br> <br>  None      | <br> <br>               | <br>  None           |
| Kenai                                   | c                               | <br> Apr-Sep                 |                            |                          |                                         |                                     | <br>           | None                 | <br> <br>               | None                 |
| 554:<br>Cohoe, dry                      | <br> <br>  B                    | <br> <br> Apr-Sep            | <br> <br>                  |                          | <br> <br>                               |                                     | <br> <br>      | <br> <br>  None      | <br> <br>               | <br>  None           |
| Kenai                                   | С                               | Apr-Sep                      |                            |                          | <br>                                    |                                     | <br>           | None                 | <br> <br>               | <br>  None           |
| 555:<br>Cohoe, dry                      | <br> <br>  B                    | <br> Apr-Sep                 | <br> <br>                  |                          | <br>                                    |                                     | <br>           | <br>  None           | <br> <br>               | <br>  None           |
| Nikolai                                 | D<br> <br>                      | Apr-May<br> Jun-Aug<br>  Sep |                            | 5.0-6.0                  | Apparent<br> Apparent<br> Apparent      | 0.1-0.3<br> <br> 0.1-0.3            | <br> <br>      | Rare<br><br>Rare     | <br> <br>               | None None None       |
| 556:<br>Cohoe, dry                      | <br> <br>  B                    | <br> <br> Apr-Sep            | <br> <br>                  |                          | <br> <br>                               |                                     | <br> <br>      | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| Nikolai                                 | <br> <br> <br>                  | Apr-May<br> Jun-Aug<br>  Sep |                            | 5.0-6.0                  | <br> Apparent<br> Apparent<br> Apparent | 0.1-0.3<br> <br> 0.1-0.3            | <br> <br>      | Rare<br><br>Rare     | <br> <br>               | None None None       |
| 557:<br>Cytex Creek                     | <br>  C<br>                     | <br> <br>  Apr<br> May-Sep   | <br> 1.6-2.5<br> 0.8-1.6   | <br> 5.0-5.0<br> 5.0-5.0 | <br> Apparent<br> Apparent              | <br> <br>                           | <br> <br>      | <br>  None<br>  None | <br> <br> <br>          | <br>  None<br>  None |
| 558:<br>Doroshin                        | D                               | <br> Apr-Sep                 | 0.0-1.0                    | 5.0-6.0                  | <br> <br> Apparent                      | 0.1-0.8                             | <br>           | <br> <br>  Rare      | <br>                    | <br>  None           |
| 559:<br>Doroshin                        | D                               | <br> Apr-Sep                 | 0.0-1.0                    | 5.0-6.0                  | <br> <br> Apparent                      | <br> 0.1-0.8                        | <br> <br>      | <br> <br>  Rare      | <br>                    | <br>  None           |
| 560:<br>Dystrocryepts                   | <br> <br>  B                    | <br> Apr-Sep                 | <br>                       |                          | <br>                                    |                                     | <br> <br>      | <br> <br>  None      | <br> <br>               | <br>  None           |
| Typic Cryorthents                       | В                               | <br> Apr-Sep                 |                            |                          | <br> <br>                               |                                     | <br> <br>      | <br>  None           | <br> <br>               | <br>  None           |
| Iliamna, cool                           | В                               | <br> Apr-Sep                 |                            |                          | <br> <br>                               |                                     | <br> <br>      | <br>  None<br>       | <br> <br>               | <br>  None           |
| 561:<br>Foreland                        | <br> <br>  D<br>                | <br> Apr-Sep<br>             | <br> 0.0-1.0<br>           | <br> 5.0-6.0<br>         | <br> <br> Apparent<br>                  | <br> 0.2-0.8<br>                    | <br> <br>      | <br> <br>  Rare<br>  | <br> <br>               | <br>  None<br>       |

Table 12. Water Features—Continued

|                             | <u> </u>                   |                  | We          | t soil               |                            | Ponding                       |          |                 | Flooding       |                     |
|-----------------------------|----------------------------|------------------|-------------|----------------------|----------------------------|-------------------------------|----------|-----------------|----------------|---------------------|
| Map symbol<br>and soil name | Hydro-<br> logic<br> group | Month            | Upper limit | Lower<br>  limit<br> | Water<br>  table<br>  kind | Surface<br>  water<br>  depth | Duration | Frequency       | Duration       | Frequency           |
| F60.                        |                            | <br>             | Ft.         | <br>  Ft.            | <br>                       | Ft.                           |          |                 | <br>           |                     |
| 562:<br>Foreland            | - D                        | <br> Apr-Sep     | 0.0-1.0     | 5.0-6.0              | <br> Apparent              | 0.2-0.8                       |          | Rare            | <br>           | None                |
| Soldotna                    | <br>-  B                   | <br> Apr-Sep     |             |                      | <br>                       |                               |          | <br>  None      | <br>           | None                |
| Starichkof                  | <br>-  D                   | <br> Apr-Sep     | 0.0-0.8     | <br> 5.0-5.0         | <br> Apparent              | 0.0-0.3                       | Brief    | <br> Occasional | <br>           | <br>  None          |
| 563:<br>Pits, gravel        | <br> <br>-                 |                  | <br> <br>   | <br> <br>            | <br> <br>                  | <br>                          |          |                 | <br> <br>      | <br> <br>           |
| 564:<br>Iliamna             | <br> <br>-  B<br>          | <br> Apr-Sep     |             | <br>                 | <br> <br> <br>             | <br>                          |          | <br>  None      | <br> <br> <br> | <br> <br>  None<br> |
| 565:<br>Iliamna             | <br>-  В<br>               | <br> Apr-Sep     |             | <br>                 | <br> <br>                  |                               |          | <br>  None      | <br> <br>      | <br>  None<br>      |
| 566:<br>Iliamna             | ј<br>-  В<br>              | <br> Apr-Sep<br> | <br> <br>   | j<br> <br>           | <br> <br>                  | <br>   <br>                   |          | <br>  None<br>  | <br> <br>      | <br>  None<br>      |
| 567:<br>Iliamna, cool       | ј<br>-  В<br>              | <br> Apr-Sep<br> | <br> <br>   | <br>                 | j<br> <br>                 | <br>                          |          | <br>  None<br>  | j<br> <br>     | <br>  None<br>      |
| 568:<br>Island              | ј<br>-  В<br>              | <br> Apr-Sep     | <br>        | <br> <br>            | <br> <br>                  | <br>                          |          | <br>  None<br>  | j<br> <br>     | <br>  None<br>      |
| 569:<br>Island              | <br>-  В                   | <br> Apr-Sep     |             |                      | <br>                       |                               |          | None            | <br> <br>      | <br>  None          |
| 570:<br>Island              | <br>-  В<br>               | <br> Apr-Sep     | <br>        | <br>                 | <br> <br>                  | <br>                          |          | <br>  None      | <br> <br>      | <br>  None          |
| 571:<br>Island              | <br>-  B<br>               | <br> Apr-Sep     |             |                      | <br> <br>                  |                               |          | <br>  None      | <br> <br>      | <br>  None          |
| 572: Island, forested       | <br>-  B<br>               | <br> Apr-Sep     | <br>        | <br>                 | <br> <br>                  | <br>                          |          | <br>  None      | <br> <br>      | <br>  None          |
| 573:<br>Kachemak            | <br>-  B<br>               | <br> Apr-Sep     |             |                      | <br>                       |                               |          | <br>  None      | <br> <br>      | <br>  None          |
| 574:<br>Kachemak            | <br>-  B<br>               | <br> Apr-Sep     |             |                      | <br>                       |                               |          | None            | <br> <br>      | <br>  None          |
| 575:<br>Kachemak            | <br>-  B<br>               | <br> Apr-Sep     |             |                      | <br> <br>                  |                               |          | <br>  None      | <br> <br>      | <br>  None          |
| 576:<br>Kachemak            | <br>-  B<br>               | <br> Apr-Sep     |             |                      | <br>                       |                               |          | <br>  None      | <br> <br>      | <br>  None          |
| 577:<br>Kachemak            | <br>-  B                   | <br> Apr-Sep     |             |                      | <br>                       |                               |          | <br>  None      | <br>           | <br>  None          |
| 578:<br>Kachemak, cool      | <br> -  B                  | <br> Apr-Sep     |             |                      | <br> <br>                  |                               |          | <br>  None      | <br> <br>      | <br> <br>  None     |
| 579:<br>Kachemak, cool      | <br>-  B                   | <br> Apr-Sep     |             |                      | <br> <br>                  |                               |          | <br>  None      | <br> <br>      | <br> <br>  None     |
| 580:<br>Kachemak, cool      | <br>-  B<br>               | <br> Apr-Sep<br> | <br> <br>   |                      | <br> <br> <br>             |                               |          | <br>  None<br>  | <br> <br> <br> | <br> <br>  None<br> |

Table 12. Water Features—Continued

|                             |                                 |                       | We                                               | t soil             |                                                      | P                            | onding   |                     | Flooding       |                     |
|-----------------------------|---------------------------------|-----------------------|--------------------------------------------------|--------------------|------------------------------------------------------|------------------------------|----------|---------------------|----------------|---------------------|
| Map symbol<br>and soil name | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>  | <br>  Upper<br>  limit<br>                       | Lower<br>  limit   | Water<br>  table<br>  kind                           | Surface <br> water<br> depth | Duration | Frequency           | Duration       | Frequency           |
|                             |                                 |                       | <br>  Ft.                                        | <br>  Ft.          | <br>                                                 | <br>  Ft.                    |          |                     | <br>           |                     |
| 581:<br>Kachemak, cool      | <br> <br>  B                    | <br> <br> Apr-Sep     |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| 582:<br>Kachemak, cool      | <br> <br>  B                    | <br> Apr-Sep          |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | <br>  None          |
| 583:<br>Kachemak, forested  | <br> <br>  B                    | <br> <br> Apr-Sep     |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | <br>  None          |
| 584:<br>Kachemak, forested  | <br> <br>  B                    | <br> Apr-Sep          |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | <br>  None          |
| 585:<br>Kachemak, forested  | <br> <br>  B                    | <br> Apr-Sep          |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| 586:<br>Kachemak, cool      | <br> <br>  B                    | <br> Apr-Sep          |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| Snowdance                   | D                               | <br> Apr-Sep          | 0.5-2.0                                          | 5.0-6.0            | <br> Apparent                                        |                              |          | <br>  None          | <br>           | <br>  None          |
| 587:<br>Kachemak, cool      | <br> <br>  B                    | <br> <br> Apr-Sep     |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| Snowdance                   | D                               | <br> Apr-Sep          | 0.5-2.0                                          | 5.0-6.0            | <br> Apparent                                        |                              |          | <br>  None          | <br>           | <br>  None          |
| 588:<br>Kachemak, cool      | <br> -<br>  B                   | <br> Apr-Sep          |                                                  |                    | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| Snowdance                   | D                               | <br> Apr-Sep          | 0.5-2.0                                          | 5.0-6.0            | <br> Apparent                                        |                              |          | <br>  None          | <br>           | <br>  None          |
| 589:<br>Kalifonsky          | <br> -<br>  D                   | <br> <br> Apr-Sep     | 0.0-1.0                                          | 5.0-5.0            | <br> <br> Apparent                                   | 0.2-0.8                      |          | <br> <br>  Rare     | <br> <br>      | None                |
| 590:<br>Kalifonsky          | <br> -<br>  D                   | <br> Apr-Sep          | 0.0-1.0                                          | 5.0-5.0            | <br> <br> Apparent                                   | 0.2-0.8                      |          | <br> <br>  Rare     | <br> <br>      | <br>  None          |
| 591:<br>Kalifonsky          | <br>  D                         | <br> <br> Apr-Sep     | 0.0-1.0                                          | 5.0-5.0            | <br> <br> Apparent                                   | 0.2-0.8                      |          | <br> <br>  Rare     | <br> <br>      | <br>  None          |
| Typic Cryorthents           | <br>  B                         | <br> Apr-Sep          |                                                  |                    | <br>                                                 |                              |          | <br>  None          | <br>           | None                |
| 592:<br>Karluk              | <br>  C<br> <br>                |                       | <br> 0.8-2.0<br> 1.2-2.0<br> 0.9-2.0<br> 0.8-2.0 | 5.0-6.0<br>5.0-6.0 | <br> Apparent<br> Apparent<br> Apparent<br> Apparent | <br>   <br>                  | <br><br> | None None None None | <br> <br> <br> | None None None None |
| 593:<br>Kashwitna           | <br> <br>  B                    | <br> <br> Apr-Sep     |                                                  | <br> <br>          | <br> <br>                                            |                              |          | <br>  None          | <br> <br>      | None                |
| 594:<br>Kashwitna           | <br> <br>  B                    | <br> <br> Apr-Sep     |                                                  |                    | <br> <br>                                            |                              |          | <br> <br>  None     | <br> <br>      | <br>  None          |
| 595:<br>Kashwitna           | <br> <br> -<br>  B              | <br> <br> Apr-Sep<br> | <br> <br>                                        |                    | <br> <br>                                            |                              |          | <br> <br>  None<br> | <br> <br> <br> | <br> <br>  None<br> |

Table 12. Water Features—Continued

|                                        |                                 |                        | We                         | t soil               |                                | Ponding                             |          |                      | Flooding                |                      |
|----------------------------------------|---------------------------------|------------------------|----------------------------|----------------------|--------------------------------|-------------------------------------|----------|----------------------|-------------------------|----------------------|
| Map symbol<br>and soil name            | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>   | <br>  Upper<br>  Iimit<br> | Lower<br>  limit<br> | Water<br>  table<br>  kind     | <br> Surface <br>  water<br>  depth | Duration | Frequency            | <br>  Duration<br> <br> | Frequency            |
|                                        |                                 |                        | <br>  Ft.                  | <br>  Ft.            | <br> <br>                      | <br>  Ft.                           |          |                      | <br> <br>               |                      |
| 596:<br>Kashwitna, moderately<br>steep | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             | <br> <br> <br>       | <br> <br> <br>                 | <br> <br>                           |          | <br> <br> <br>  None | <br> <br> <br>          | <br> <br> <br>  None |
| Kashwitna, strongly sloping            | <br> <br>  B                    | <br> <br> Apr-Sep      | <br> <br>                  | <br> <br>            | <br> <br>                      | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| 597:<br>Kenai                          | C                               | <br> <br> Apr-Sep      | <br> <br>                  |                      | <br> <br>                      |                                     |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| 598:<br>Kenai                          | С                               | <br> <br> Apr-Sep      | <br> <br>                  | <br>                 | <br> <br>                      | <br>                                |          | <br>  None           | <br> <br>               | <br>  None           |
| 599:<br>Kenai                          | C                               | <br> <br> Apr-Sep      | <br> <br> <br>             | <br>                 | <br> <br>                      | <br>                                |          | <br>  None           | <br> <br>               | <br>  None           |
| 600:<br>Kenai                          | C                               | <br> Apr-Sep           | <br> <br> <br>             | <br>                 | <br> <br>                      | <br>                                |          | <br>  None           | <br> <br>               | <br>  None           |
| 601:<br>Kenai                          | С                               | <br> Apr-Sep           | <br> <br>                  | <br>                 | <br> <br>                      | <br>                                |          | <br>  None           | <br> <br> <br>          | <br>  None           |
| 602: Kenai, moderately steep           | C<br>C                          | <br> <br> Apr-Sep      | <br> <br>                  | <br> <br>            | <br> <br>                      | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| Kenai, gently sloping                  | C                               | <br> Apr-Sep           | <br>                       |                      | <br>                           |                                     |          | None                 | <br>                    | None                 |
| 603:<br>Kenai                          | C                               | <br> <br> Apr-Sep      | <br> <br>                  | <br> <br>            | <br> <br>                      |                                     |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| Starichkof                             | D                               | <br> Apr-Sep           | <br> 0.0-0.8<br>           | 5.0-5.0              | <br> Apparent                  | 0.0-0.5                             | Long     | <br> Occasional      | <br>                    | None                 |
| 604:<br>Kichatna                       | <br> <br>  B                    | <br> <br> Apr-Sep      | <br> <br>                  | <br> <br>            | <br> <br>                      |                                     |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| 605:<br>Kichatna                       | <br> <br>  B                    | <br> <br> Apr-Sep<br>  | <br> <br> <br>             | <br> <br>            | <br> <br> <br>                 | <br>                                |          | <br>  None           | <br> <br> <br>          | <br> <br>  None      |
| 606:<br>Kichatna                       | <br>  B                         | <br> <br> Apr-Sep<br>  | <br> <br> <br>             | <br>                 | <br> <br> <br>                 | <br>                                |          | <br>  None           | <br> <br> <br>          | <br>  None<br>       |
| 607:<br>Kichatna                       | <br>  B                         | <br> <br> Apr-Sep<br>  | <br> <br> <br>             | <br>                 | <br> <br> <br>                 | <br>                                |          | <br>  None           | <br> <br> <br>          | <br>  None<br>       |
| 608:<br>Kichatna                       | <br>  B                         | <br> <br> Apr-Sep      | <br> <br>                  | <br>                 | <br> <br> <br>                 | <br>                                |          | <br>  None           | <br> <br> <br>          | <br>  None           |
| 609:<br>Kichatna                       | <br> <br>  B                    | <br> <br> Apr-Sep<br>  | <br> <br> <br>             | <br> <br>            | <br> <br> <br>                 | <br>                                |          | <br>  None<br>       | <br> <br> <br>          | <br>  None<br>       |
| Killey                                 | С                               | Apr<br>  May-Sep       |                            |                      | <br> Apparent<br> Apparent<br> | <br>                                |          | None None            | <br> <br>  Brief<br>    | <br> <br>  Frequent  |
| 610:<br>Kidazqeni                      | <br>  A<br>                     | <br> <br> Apr-Sep<br>  | <br> <br> <br>             | <br> <br> <br>       | <br> <br> <br>                 | <br>   <br>                         |          | <br> <br>  None<br>  | <br> <br> <br>          | <br> <br>  Rare<br>  |

Table 12. Water Features—Continued

|                             |                                 |                                        | We                             | t soil           |                                 | P                            | onding                   | Flooding                 |                         |                          |
|-----------------------------|---------------------------------|----------------------------------------|--------------------------------|------------------|---------------------------------|------------------------------|--------------------------|--------------------------|-------------------------|--------------------------|
| Map symbol<br>and soil name | <br> Hydro-<br> logic<br> group | Month<br> <br>                         | Upper limit                    | Lower<br>  limit | Water<br>  table<br>  kind      |                              | Duration                 | Frequency                | <br>  Duration<br> <br> | Frequency                |
|                             | -                               |                                        | <br>  Ft.                      | <br>  Ft.        | <br>                            | <br>  Ft.                    | <u> </u>                 |                          | <br> <br>               |                          |
| 611:<br>Killey              | C                               | <br> <br>  Apr<br> May-Sep             | <br> -<br> 2.0-3.0<br> 1.0-2.0 |                  | <br> <br> Apparent<br> Apparent | <br> <br>                    | <br> <br> <br>           | None None                | <br> <br> <br>  Brief   | <br> <br> <br>  Frequent |
| Moose River                 | D                               | <br>  Apr<br> May-Sep                  | <br> 0.0-1.6<br> 0.0-1.6       |                  | <br> Apparent<br> Apparent      | <br> <br>                    | <br> <br>                | None None                | <br> <br>  Brief        | <br> <br>  Frequent      |
| 612:<br>Liten               | A                               | <br> <br> Apr-Sep                      | <br> <br>                      | <br> <br>        | <br> <br>                       |                              | <br> <br>                | <br>  None               | <br> <br>               | <br> <br>  None          |
| 613:<br>Lithic Haplocryands | -  D                            | <br> Apr-Sep                           | <br>                           |                  | <br>                            |                              | <br> <br>                | <br>  None               | <br> <br>               | <br>  None               |
| Alic Haplocryands           | c                               | Apr-Sep                                |                                |                  |                                 |                              |                          | <br>  None               | <br>                    | None                     |
| Rock outcrop                |                                 | Apr-Sep                                |                                |                  | <br>                            |                              |                          | None                     | <br>                    | <br>  None               |
| 614:<br>Lithic Haplocryands | -  D                            | <br> <br> Apr-Sep                      | <br> <br>                      |                  | <br> <br>                       | <br> <br>                    | <br> <br>                | None                     | <br> <br>               | <br> <br>  None          |
| Alic Haplocryands           | c                               | Apr-Sep                                |                                |                  | <br>                            |                              |                          | <br>  None               | <br>                    | <br>  None               |
| Rock outcrop                |                                 | <br> Apr-Sep                           | ļ<br>ļ                         |                  | <br>                            |                              |                          | <br>  None               | <br>                    | <br>  None               |
| 615:<br>Longmare            | C                               | <br> <br> Apr-May<br> Jun-Aug<br>  Sep | <br> 2.0-2.5<br> <br> 1.6-2.5  | j                | <br> Apparent<br> <br> Apparent | <br> <br>                    | <br> <br>                | None None None           | <br> <br> <br>          | None None None           |
| 616:<br>Longmare            | C                               | <br> Apr-May<br> Jun-Aug<br>  Sep      | <br> 2.0-2.5<br> <br> 1.6-2.5  | j                | <br> Apparent<br> <br> Apparent | <br> <br>                    | <br> <br>                | None None None           | <br> <br>               | None<br>None<br>None     |
| 617:<br>Mutnala             | <br> <br>  B                    | <br> <br> Apr-Sep                      | <br> <br>                      | <br> <br>        | <br> <br>                       | <br> <br>                    | <br> <br>                | <br>  None               | <br> <br>               | <br> <br>  None          |
| 618:<br>Mutnala             | <br>  B                         | <br> <br> Apr-Sep                      | <br> <br>                      |                  | <br> <br>                       |                              | <br> <br>                | <br>  None               | <br> <br> <br>          | <br> <br>  None          |
| 619:<br>Mutnala             | <br>  B                         | <br> Apr-Sep                           | <br> <br>                      | <br>             | <br> <br>                       |                              | <br> <br>                | <br>  None               | <br> <br> <br>          | <br>  None               |
| 620:<br>Mutnala             | <br>  B                         | <br> Apr-Sep                           | <br> <br>                      | <br>             | <br> <br>                       |                              | <br>                     | <br>  None               | <br> <br> <br>          | <br>  None               |
| 621:<br>Mutnala             | <br>  B                         | <br> Apr-Sep                           | <br>                           |                  | <br>                            |                              | <br> <br>                | <br>  None               | <br> <br>               | <br>  None               |
| 622:<br>Mutnala             | <br>   B<br>                    | <br> <br> Apr-Sep<br>                  | <br> <br>                      |                  | <br> <br>                       |                              | <br> <br> <br>           | <br>  None               | <br> <br> <br>          | <br> <br>  None<br>      |
| 623:<br>Mutnala             | <br>  B<br>                     | <br> <br> Apr-Sep                      | <br> <br>                      |                  | <br> <br>                       |                              | <br> <br>                | <br>  None               | <br> <br> <br>          | <br> <br>  None<br>      |
| Starichkof                  | D                               | <br> Apr-Sep                           | 0.0-0.8                        | 5.0-5.0          | <br> Apparent                   | 0.0-0.3                      | <br>  Brief<br>          | Occasional               | <br> <br>               | None                     |
| Slikok                      | D                               | <br> Apr-Aug<br>  Sep<br>              | <br> 0.0-0.3<br> 0.0-0.3       |                  | <br> Apparent<br> Apparent<br>  | <br> 0.0-1.0<br> 0.0-1.0<br> | <br>  Long<br>  Long<br> | Occasional<br>Occasional | <br>  Brief<br> <br>    | Occasional               |

Table 12. Water Features—Continued

|                                             | <u> </u>                        |                                   | We                    | t soil               |                                         | P                                 | onding    |                           | Floodi                  | ng                   |
|---------------------------------------------|---------------------------------|-----------------------------------|-----------------------|----------------------|-----------------------------------------|-----------------------------------|-----------|---------------------------|-------------------------|----------------------|
| Map symbol<br>and soil name                 | <br> Hydro-<br> logic<br> group | Month                             | Upper limit           | Lower<br>  limit<br> | Water<br>  table<br>  kind              |                                   | Duration  | Frequency                 | <br>  Duration<br> <br> | Frequency<br> <br>   |
|                                             | - <u> </u>                      | <br>                              | <br>  Ft.             | <br>  Ft.            | <br>                                    | <br>  Ft.                         |           |                           | <br>                    |                      |
| 624:<br>Naptowne                            | <br>  B<br>                     | <br> Apr-Sep                      | <br>                  | <br>                 | <br> <br>                               | <br>                              |           | <br>  None<br>            | <br> <br>               | <br>  None           |
| 625:<br>Naptowne                            | -  B                            | Apr-Sep                           | <br>                  |                      | <br>                                    |                                   |           | None                      |                         | None                 |
| 626:<br>Naptowne                            | <br> -<br>  B                   | <br> <br> Apr-Sep                 | <br> <br>             | <br> <br>            | <br> <br>                               | <br> <br>                         |           | <br> <br>  None           | <br> <br>               | <br> <br>  None      |
| 627:<br>Naptowne                            | <br> <br>  B                    | <br> <br> Apr-Sep                 | <br> <br>             | <br> <br>            | <br> <br>                               | <br>                              |           | <br> <br>  None           | <br> <br>               | <br> <br>  None      |
| 628:<br>Naptowne                            | <br> <br>   B                   | <br> <br> Apr-Sep                 | <br> <br>             |                      | <br> <br>                               | <br> <br>                         |           | <br> <br>  None           | <br> <br>               | <br> <br>  None      |
| 629:<br>Naptowne                            | <br> <br>   B                   | <br> <br> Apr-Sep                 | <br> <br>             |                      | <br> <br>                               |                                   |           | <br>  None                | <br> <br>               | <br> <br>  None      |
| 630:<br>Naptowne, moderately<br>steep       | <br> <br> -<br> B               | <br> <br> Apr-Sep                 | <br> <br> <br>        |                      | <br> <br> <br>                          |                                   |           | <br> <br>  None           | <br> <br> <br>          | <br> <br> <br>  None |
| Naptowne, strongly sloping                  | -  B                            | Apr-Sep                           | <br> <br>             |                      | <br> <br>                               |                                   |           | <br>  None                | <br> <br>               | <br>  None           |
| 631: Naptowne, strongly sloping             | <br> <br> <br>   B              | <br> <br> Apr-Sep                 | <br> <br> <br>        |                      | <br> <br> <br>                          |                                   |           | <br> <br>  None           | <br> <br> <br>          | <br> <br> <br>  None |
| Naptowne, gently sloping                    | <br> <br>  B                    | <br> <br> Apr-Sep                 | <br> <br>             |                      | <br> <br>                               |                                   |           | <br>  None                | <br> <br>               | <br>  None           |
| 632:<br>Niklason                            | <br> -<br>  B                   | <br> Apr-Sep                      | <br> <br>             |                      | <br> <br>                               |                                   |           | <br>  None                | <br> <br>  Brief        | <br> <br> Occasional |
| 633:<br>Nikolaevsk                          | -  D                            | <br> Apr-Sep                      | <br> <br> 0.8-1.6     | <br> 5.0-5.0         | <br> <br> Apparent                      |                                   |           | <br>  None                | <br> <br>               | <br> <br>  None      |
| 634:<br>Nikolaevsk                          | D                               | <br> Apr-Sep                      | 0.8-1.6               | 5.0-5.0              | <br> <br> Apparent                      |                                   |           | None                      | <br> <br>               | <br> <br>  None      |
| 635:<br>Nikolaevsk                          | D                               | <br> Apr-Sep                      | 0.8-1.6               | 5.0-5.0              | <br> <br> Apparent                      |                                   |           | None                      | <br> <br>               | <br>  None           |
| 636:<br>Nikolai                             | <br>   D<br>                    | <br> Apr-May<br> Jun-Aug<br>  Sep |                       | 5.0-6.0              | <br> Apparent<br> Apparent<br> Apparent | <br> 0.1-0.3  <br>   <br> 0.1-0.3 | <br> <br> | <br>  Rare<br> <br>  Rare | <br> <br> <br>          | None None None       |
| 637:<br>Nikolai, somewhat<br>poorly drained | <br> <br>  D<br>                | <br> Apr-Sep<br>                  | <br> <br> 1.6-2.5<br> | <br> 5.0-6.0<br>     | <br> <br> Apparent<br>                  | <br>   <br>                       |           | <br>  None                | <br> <br> <br>          | <br>  None<br>       |
| Tuxedni                                     | - C                             | <br> Apr-Sep                      | <br> 1.1-2.5<br>      | <br> 5.0-5.0         | <br> Apparent                           |                                   |           | None                      | <br>                    | <br>  None           |
| 638:<br>Puntilla                            | -  B                            | <br> Apr-Sep                      |                       |                      | <br> <br>                               |                                   |           | <br>  None                | <br> <br>               | <br> <br>  None      |
| 639:<br>Puntilla                            | <br> <br>   B                   | <br> <br> Apr-Sep<br>             | <br> <br> <br>        |                      | <br> <br> <br>                          | <br>                              |           | <br>  None                | <br> <br> <br>          | <br> <br>  None<br>  |

Table 12. Water Features—Continued

|                                | <br> <br>                       |                                        | We             | t soil               |                                      | F                                         | onding                    |                                     | Floodi                  | ng                             |
|--------------------------------|---------------------------------|----------------------------------------|----------------|----------------------|--------------------------------------|-------------------------------------------|---------------------------|-------------------------------------|-------------------------|--------------------------------|
| Map symbol<br>and soil name    | <br> Hydro-<br> logic<br> group | Month<br> <br>                         | Upper limit    | Lower<br>  limit<br> | Water<br>  table<br>  kind           | Surface<br> Surface<br>  water<br>  depth | Duration                  | Frequency                           | <br>  Duration<br> <br> | Frequency<br> <br>             |
| 0.40                           | <br>                            |                                        | <br>  Ft.      | <br>  Ft.            | <br>                                 | <br>  Ft.                                 | <br>                      | <br>                                | <br>                    |                                |
| 640:<br>Qutal                  | <br>  C<br>                     | <br> Apr-May<br> Jun-Aug<br>  Sep      | j              | j                    | <br> Apparent<br> <br> Apparent      | <br> <br>                                 | <br> <br>                 | <br>  None<br>  None<br>  None      | <br> <br>               | None<br>  None<br>  None       |
| 641:<br>Qutal                  | <br> <br>  C<br>                | <br> <br> Apr-May<br> Jun-Aug<br>  Sep | j              | j                    | <br> <br> Apparent<br> <br> Apparent | <br> <br> <br>                            | <br> <br> <br>            | <br> <br>  None<br>  None<br>  None | <br> <br> <br>          | <br>  None<br>  None<br>  None |
| 642:<br>Qutal                  | <br> <br>  C<br>                | <br> Apr-May<br> Jun-Aug<br>  Sep      | j              | j                    | <br> Apparent<br> <br> Apparent      | <br> <br> <br>                            | <br> <br> <br>            | <br> <br>  None<br>  None<br>  None | <br> <br> <br>          | <br>  None<br>  None<br>  None |
| 643:<br>Redoubt, terraces      | <br> <br> <br>  B               | <br> <br> Apr-Sep                      |                |                      | <br> <br> <br>                       | <br> <br>                                 | <br> <br>                 | <br> <br> <br>  None                | <br> <br>               | <br> <br>  None                |
| 644:<br>Redoubt                | <br> <br>  B<br>                | <br> Apr-Sep                           | <br> <br>      |                      | <br> <br> <br>                       |                                           | <br>                      | <br> <br>  None<br>                 | <br> <br> <br>          | <br>  None                     |
| 645:<br>Redoubt                | <br>  B<br>                     | <br> Apr-Sep                           | <br> <br>      |                      | <br> <br>                            |                                           | <br>                      | <br>  None<br>                      | <br> <br> <br>          | <br>  None                     |
| 646:<br>Redoubt, cool          | <br>  B<br>                     | <br> Apr-Sep                           | <br>           |                      | <br> <br>                            |                                           | <br>                      | <br> <br>  None                     | <br> <br>               | <br>  None                     |
| 647: Redoubt, moderately steep | <br> <br> <br> B                | <br> <br> Apr-Sep                      | <br> <br>      | <br> <br>            | <br>                                 | <br> <br>                                 | <br> <br>                 | <br> <br>  None                     | <br> <br>               | <br> <br>  None                |
| Redoubt, gently sloping        | <br>  B                         | <br> Apr-Sep                           | <br>           |                      | <br>                                 |                                           | <br>                      | <br>  None                          | <br>                    | None                           |
| 648:<br>Redoubt, cool          | <br> <br>  B                    | <br> <br> Apr-Sep                      | <br> <br>      |                      | <br> <br>                            |                                           | <br> <br>                 | <br> <br>  None                     | <br> <br>               | <br> <br>  None                |
| Tuxedni                        | c                               | <br> Apr-Sep                           | 1.1-2.5        | 5.0-5.0              | <br> Apparent                        |                                           |                           | <br>  None                          | <br>                    | None                           |
| 649:<br>Riverwash              | <br> <br> <br>                  | <br> <br> Apr-Sep<br>                  | <br> <br> <br> | <br> <br> <br>       | <br> <br> <br>                       | <br> <br> <br>                            | <br> <br> <br>            | <br> <br>  None<br>                 | <br> <br>  Long<br>     | <br> <br>  Very<br>  frequent  |
| 650:<br>Salamatof              | <br> <br>  D                    | <br> <br> Apr-Sep                      | <br> <br>  0.0 | <br> 5.0-6.0         | <br> <br> Apparent                   | 0.0-1.0                                   | <br> <br> Very long       | <br> <br> Occasional                | <br> <br>               | <br> <br>  None                |
| Doroshin                       | <br>  D                         | <br> Apr-Sep                           | 0.0-1.0        | 5.0-6.0              | <br> Apparent                        | 0.1-0.8                                   | <br>                      | <br>  Rare                          | <br>                    | None                           |
| 651:<br>Salamatof              | <br> <br>  D                    | <br> <br> Apr-Sep                      | 0.0            |                      | <br> <br> Apparent                   | 0.0-1.0                                   | <br> <br> Very long       | <br> <br> Occasional                | <br> <br>               | <br> <br>  None                |
| 652:<br>Slikok                 | <br> <br>  D<br>                | <br> Apr-Aug<br>  Sep                  |                |                      | <br> <br> Apparent<br> Apparent      |                                           | <br> <br>  Long<br>  Long | <br> <br> Occasional<br> Occasional | <br> <br>  Brief<br>    | <br> Occasional<br>            |
| 653:<br>Slikok                 | <br> <br>  D<br>                | <br> Apr-Aug<br>  Sep                  |                |                      | I<br> <br> Apparent<br> Apparent<br> |                                           | <br> <br>  Long<br>  Long | <br> <br> Occasional<br> Occasional | <br> <br>  Brief<br>    | <br> Occasional<br>            |
| 654:<br>Smithfha               | <br> <br>  B<br>                | <br> <br> Apr-Sep<br>                  | <br> <br> <br> | <br> <br>            | <br> <br> <br>                       | <br> <br>                                 | <br> <br> <br>            | <br> <br>  None<br>                 | <br> <br> <br>          | <br> <br>  None<br>            |

Table 12. Water Features—Continued

|                                       | <u> </u>                        | <u> </u>               | We                         | t soil               |                            | P                                   | onding   |                      | Floodi                  | ng                   |
|---------------------------------------|---------------------------------|------------------------|----------------------------|----------------------|----------------------------|-------------------------------------|----------|----------------------|-------------------------|----------------------|
|                                       | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>   | <br>  Upper<br>  limit<br> | Lower<br>  limit<br> | Water<br>  table<br>  kind | <br> Surface <br>  water<br>  depth | Duration | Frequency            | <br>  Duration<br> <br> | Frequency            |
|                                       | <br>                            |                        | <br>  Ft.                  | - <br>  Ft.          |                            | <br>  Ft.                           |          | <br>                 | <br>                    |                      |
| 655:<br>Smithfha                      | <br> <br>  B                    | <br> <br> Apr-Sep      |                            |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| 656:<br>Smokey Bay                    | <br>  C<br>                     | <br> <br> Apr-Sep<br>  | 0.5-2.0                    | 5.0-5.0              | <br> <br> Apparent<br>     |                                     |          | <br> <br>  None<br>  | <br> <br> <br>          | <br>  None           |
| 657:<br>Smokey Bay                    | C                               | <br> Apr-Sep           | 0.5-2.0                    | 5.0-5.0              | <br> Apparent              |                                     |          | <br>  None           | <br> <br>               | <br>  None           |
| 658:<br>Snowdance                     | <br>  D                         | <br> Apr-Sep           | 0.5-2.0                    | 5.0-6.0              | <br> Apparent              |                                     |          | <br>  None           | <br>                    | <br>  None           |
| 659:<br>Soldotna                      | <br> <br>  B                    | <br> <br> Apr-Sep      |                            |                      | <br>                       |                                     |          | <br> <br>  None      | <br> <br>               | <br>  None           |
| 660:<br>Soldotna                      | <br> <br>  B                    | <br> <br> Apr-Sep      |                            |                      | <br>                       |                                     |          | <br> <br>  None      | <br> <br>               | <br>  None           |
| 661:<br>Soldotna                      | <br> <br>  B                    | <br> <br> Apr-Sep      |                            |                      | <br> <br>                  |                                     |          | <br>  None           | <br> <br>               | <br> <br>  None      |
| 662:<br>Soldotna                      | <br> <br>  B                    | <br> <br> Apr-Sep      |                            |                      | <br> <br>                  |                                     |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| 663:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br>                           |          | <br> <br> <br>  None | <br> <br> <br>          | <br> <br> <br>  None |
| 664:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br> <br>                      |          | <br> <br>  None      | <br> <br> <br>          | <br> <br> <br>  None |
| 665:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br>                           |          | <br> <br>  None      | <br> <br> <br>          | <br> <br> <br>  None |
| 666:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br>                           |          | <br> <br>  None      | <br> <br> <br>          | <br> <br>  None      |
| 667:<br>Soldotna, strongly<br>sloping | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br>                  |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None      |
| Soldotna, gently sloping              | <br> <br>  B                    | <br> Apr-Sep           |                            |                      | <br>                       |                                     |          | <br>  None           | <br> <br>               | <br>  None           |
| 668:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br> <br>                      |          | <br> <br> <br>  None | <br> <br> <br>          | <br> <br> <br>  None |
| Kenai                                 | C                               | <br> Apr-Sep           |                            |                      | <br>                       |                                     |          | <br>  None           | <br>                    | <br>  None           |
| 669:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  B               | <br> <br> <br> Apr-Sep | <br> <br> <br>             |                      | <br> <br> <br>             | <br> <br> <br>                      |          | <br> <br> <br>  None | <br> <br> <br>          | <br> <br> <br>  None |
| Kenai                                 | <br>  C<br>                     | <br> Apr-Sep<br>       | <br>                       | <br>                 | <br> <br>                  | <br> <br>                           |          | <br>  None<br>       | <br> <br>               | <br>  None<br>       |

Table 12. Water Features—Continued

|                              |                                 |                                           | We                 | et soil                |                                         | P                            | onding       |                                | Floodi          | ng              |
|------------------------------|---------------------------------|-------------------------------------------|--------------------|------------------------|-----------------------------------------|------------------------------|--------------|--------------------------------|-----------------|-----------------|
| Map symbol<br>and soil name  | <br> Hydro-<br> logic<br> group | <br>  Month<br> <br>                      | Upper limit        | Lower<br>  limit       | Water<br>  table<br>  kind              | Surface <br> water<br> depth | Duration     | Frequency                      | Duration        | Frequency       |
|                              | <br> <br>                       | .                                         | <br>  Ft.          | <br>  Ft.              |                                         | <br>  Ft.                    |              |                                | <br>            | .  <br>         |
| 670:<br>Soldotna             | B                               | <br> <br> Apr-Sep                         |                    |                        |                                         |                              |              | <br> <br>  None                | <br> <br>       | <br> <br>  None |
| Kichatna                     | B                               | <br> Apr-Sep                              |                    |                        |                                         |                              |              | None                           | <br> <br>       | None            |
| 671:<br>Soldotna             | і<br>  В                        | Apr-Sep                                   |                    |                        |                                         | i<br>                        |              | <br>  None                     | j<br>           | None            |
| Kichatna                     | <br>  B                         | Apr-Sep                                   |                    |                        |                                         | <br>                         |              | <br>  None                     | <br>            | None            |
| 672:<br>Soldotna             | <br> <br>  B                    | <br> <br> Apr-Sep                         | <br> <br>          | <br> <br>  <del></del> | <br> <br>                               | <br>                         |              | <br> <br>  None                | <br> <br>       | <br> <br>  None |
| Nikolai                      | <br>  D                         | <br> Apr-May                              |                    |                        | <br> Apparent                           | 0.1-0.3                      |              | <br>  Rare                     | <br>            | <br>  None      |
|                              |                                 | Jun-Aug<br>  Sep                          | 0.0-1.5<br>0.0-1.5 |                        | Apparent<br> Apparent                   | <br> 0.1-0.3                 |              | <br>  Rare                     | <br>            | None None       |
| 673:<br>Spenard              | D                               | <br> <br> Apr-May<br> Jun-Jul<br> Aug-Sep | 1.0-2.0            | 5.0-6.0                | <br> Apparent<br> Apparent<br> Apparent |                              | <br><br>     | None None None                 | <br> <br> <br>  | None None None  |
| 674:<br>Spenard              | D                               | <br> <br> Apr-May<br> Jun-Jul<br> Aug-Sep | 1.0-2.0            | 5.0-6.0                | <br> Apparent<br> Apparent<br> Apparent | <br>   <br>                  | <br> <br>    | <br>  None<br>  None<br>  None | <br> <br> <br>  | None None None  |
| 675:<br>Spenard              | D                               | <br> <br> Apr-May<br> Jun-Jul<br> Aug-Sep | 1.0-2.0            | 5.0-6.0                | <br> Apparent<br> Apparent<br> Apparent | <br>                         | <br> <br>    | None None None                 | <br> <br> <br>  | None None None  |
| 676:<br>Starichkof           | <br> <br>  D                    | <br> <br> Apr-Sep                         | <br> <br> 0.0-0.8  | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | <br> <br> 0.0-0.3            | Brief        | <br> <br> Occasional           | <br> <br>       | <br> <br>  None |
| Doroshin                     | D                               | <br> Apr-Sep                              | 0.0-1.0            | <br> 5.0-6.0           | <br> Apparent                           | <br> 0.1-0.8                 |              | <br>  Rare                     | <br>            | None            |
| 677:<br>Starichkof           | D                               | <br> <br> Apr-Sep                         | 0.0-0.8            | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | 0.0-0.3                      | Brief        | <br> Occasional                | <br> <br>       | <br>  None      |
| 678:<br>Starichkof           | D                               | <br> <br> Apr-Sep                         | <br> <br> 0.0-0.8  | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | <br> <br> 0.0-0.3            | Brief        | <br> <br> Occasional           | <br> <br>       | <br> <br>  None |
| 679:<br>Starichkof, forested | <br> <br>  D                    | <br> <br> Apr-Sep                         | <br> <br> 0.0-0.8  | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | <br> <br> 0.0-0.3            | Brief        | <br> <br> Occasional           | <br> <br>       | <br> <br>  None |
| 680:<br>Starichkof           | <br> <br>  D                    | <br> <br> Apr-Sep                         | <br> <br> 0.0-0.8  | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | <br> <br> 0.0-0.5            | Long         | <br> <br> Occasional           | <br> <br>       | <br> <br>  None |
| Slikok                       | <br>  D<br>                     | <br> Apr-Aug<br>  Sep                     | 0.0-0.3<br>0.0-0.3 | 5.0-5.0                | <br> Apparent<br> Apparent              | į į                          | Long<br>Long | <br> Occasional<br> Occasional | <br>  Brief<br> | Occasional      |
| Naptowne                     | <br>  В                         | Apr-Sep                                   |                    |                        |                                         | <br>                         |              | None                           | <br>            | None            |
| 681:<br>Starichkof           | <br> <br>  D                    | <br> <br> Apr-Sep                         | <br> <br> 0.0-0.8  | <br> <br> 5.0-5.0      | <br> <br> Apparent                      | <br> <br> 0.0-0.3            | Brief        | <br> <br> Occasional           | <br> <br>       | <br> <br>  None |
| Spenard                      | D                               | <br> Apr-May                              | •                  | <br> 5.0-6.0           | <br> Apparent                           | <br>                         |              | None                           | j<br>           | None            |
|                              |                                 | Jun-Jul<br> Aug-Sep                       | •                  |                        | Apparent<br> Apparent                   |                              |              | None<br>  None                 | <br>            | None<br>  None  |

Table 12. Water Features—Continued

|                              |                                 |                                   | We                            | t soil               |                                 | P         | onding   |                                | Floodir                  | ng                             |
|------------------------------|---------------------------------|-----------------------------------|-------------------------------|----------------------|---------------------------------|-----------|----------|--------------------------------|--------------------------|--------------------------------|
| Map symbol<br>and soil name  | <br> Hydro-<br> logic<br> group | Month                             | Upper limit                   | Lower<br>  limit<br> | Water<br>  table<br>  kind      |           | Duration | Frequency                      | Duration                 | Frequency                      |
|                              | <br>                            | .                                 | <br>  Ft.                     | . <br>  Ft.          | <br>                            | <br>  Ft. |          |                                | <br>                     | <br>                           |
| 682:<br>Susitna              | <br> <br> -<br>  B              | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  Rare                |
| Riverwash                    | <br>-  <b></b><br>              | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br>  None<br>                 | <br>  Long<br>           | <br>  Very<br>  frequent       |
| 683:<br>Susitna              | <br> <br> -<br>  B              | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  Rare                |
| 684:<br>Talkeetna            | <br>-  B<br>                    | <br> Apr-Sep                      | <br> <br>                     |                      | <br>                            |           |          | <br>  None<br>                 | <br> <br> <br>           | <br> <br>  None<br>            |
| 685:<br>Talkeetna            | <br>-  B<br>                    | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br>  None                     | <br> <br>                | <br>  None<br>                 |
| 686:<br>Talkeetna            | <br> -<br>  B                   | <br> Apr-Sep                      | <br> <br>                     |                      | <br>                            |           |          | <br>  None                     | <br> <br>                | <br>  None<br>                 |
| Starichkof                   | D                               | <br> Apr-Sep                      | 0.0-0.8                       | 5.0-5.0              | <br> Apparent                   | 0.0-0.3   | Brief    | Occasional                     | <br> <br>                | <br>  None<br>                 |
| 687:<br>Tangerra             | <br>  D<br>                     | Apr<br>  Apr<br> May-Sep          |                               |                      | <br> Apparent<br> Apparent      | <br>      | <br>     | None None                      | <br> <br>                | None None                      |
| 688:<br>Beaches, tidal flats | <br>                            | <br> Apr-Sep                      | <br> <br> <br>                |                      | <br> <br> <br>                  | <br> <br> |          | <br> <br>  None<br>            | <br> <br> Very brief<br> | <br> <br>  Very<br>  frequent  |
| 689:<br>Tlikakila            | <br>-  C                        | <br> Apr-Sep                      | <br> <br> 1.1-2.0             | <br> 5.0-5.0         | <br> <br> Apparent              |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 690:<br>Tlikakila            | <br>-  C                        | <br> Apr-Sep                      | <br> <br> 1.1-2.0             | 5.0-5.0              | <br> <br> Apparent              |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 691:<br>Tlikakila            | c c                             | <br> Apr-Sep                      | <br> <br> 1.1-2.0             | 5.0-5.0              | <br> <br> Apparent              |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 692:<br>Tokositna            | <br> -<br>  B                   | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 693:<br>Tokositna            | <br> -<br>  B                   | <br> Apr-Sep                      | <br> <br>                     |                      | <br>                            |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 694:<br>Tokositna            | <br> -<br>  B                   | <br> Apr-Sep                      | <br> <br>                     |                      | <br> <br>                       |           |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| 695:<br>Truuli               | <br>  C<br>                     | <br> Apr-Jun<br> Jul-Aug<br>  Sep | <br> 0.7-1.5<br> <br> 0.7-1.5 | j                    | <br> Apparent<br> <br> Apparent | <br> <br> | <br>     | <br>  None<br>  None<br>  None | <br> <br> <br>           | <br>  None<br>  None<br>  None |
| 696:<br>Tutka                | <br> <br>  D                    | <br> <br> Apr-Sep                 | <br> <br>                     | <br> <br>            | <br> <br>                       | <br> <br> |          | <br> <br>  None                | <br> <br>                | <br> <br>  None                |
| Kasitsna                     | <br>-  B                        | <br> Apr-Sep                      | <br>                          | <br>                 | <br>                            | <br>      |          | <br>  None                     | <br>                     | <br>  None                     |
| Rock outcrop                 | <br>- <br>                      | <br> Apr-Sep<br>                  | <br> <br>                     |                      | <br> <br>                       |           |          | <br>  None<br>                 | <br> <br>                | <br>  None<br>                 |

Table 12. Water Features—Continued

|                             | <u> </u>                        |                   | We                         | t soil               | Por                        | nding                               | Flooding |                      | <br>I                   |                    |
|-----------------------------|---------------------------------|-------------------|----------------------------|----------------------|----------------------------|-------------------------------------|----------|----------------------|-------------------------|--------------------|
| Map symbol<br>and soil name | <br> Hydro-<br> logic<br> group | Month<br> <br>    | <br>  Upper<br>  limit<br> | Lower<br>  limit<br> | Water<br>  table<br>  kind | <br> Surface <br>  water<br>  depth | Duration | Frequency<br> <br>   | <br>  Duration<br> <br> | Frequency<br> <br> |
|                             |                                 |                   | Ft.                        | Ft.                  | <br> <br>                  | Ft.                                 |          |                      | <br> <br>               | <br>               |
| 697:<br>Tutka               | <br>  D                         | <br> <br> Apr-Sep |                            |                      | <br> <br>                  | <br>                                |          | I<br> <br>  None<br> | <br> <br>               | <br> <br>  None    |
| Portgraham                  | - c                             | Apr-Sep           |                            |                      |                            |                                     |          | <br>  None           |                         | None               |
| 698:<br>Tuxedni             | c                               | <br> <br> Apr-Sep | <br> <br> 1.1-2.5          | <br> <br> 5.0-5.0    | <br> <br> Apparent<br>     | <br> <br>                           |          | I<br> <br>  None<br> | <br> <br>               | <br> <br>  None    |
| 699:<br>Tuxedni             | c                               | <br> Apr-Sep      | 1.1-2.5                    | 5.0-5.0              | <br> <br> Apparent<br>     | <br>                                |          | <br>  None<br>       | <br> <br>               | <br>  None<br>     |
| 700:<br>Tuxedni, warm       | <br>-  B<br>                    | <br> Apr-Sep      | <br> 1.1-2.5<br>           | 5.0-5.0              | <br> Apparent<br>          | <br>                                |          | <br>  None<br>       | <br> <br>               | <br>  None<br>     |
| 701:<br>Typic Cryaquents    | <br>  D                         | <br> Apr-Sep      | 0.3-2.0                    | 5.0-6.0              | <br> Apparent<br>          | <br>   <br>                         |          | <br>  None<br>       | <br> Very brief<br>     | <br>  Frequent<br> |
| 702:<br>Typic Cryopsamments | <br>  A                         | <br> Apr-Sep      |                            |                      | <br>                       | <br>                                |          | <br>  None           | <br>                    | <br>  None         |
| 703:<br>Typic Cryorthents   | <br> -<br>  B                   | <br> Apr-Sep      |                            |                      |                            | <br>                                |          | <br> <br>  None      | <br>                    | <br>  None         |
| 704:<br>Urban land          | <br>-                           | <br>              |                            |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>            | <br> <br>               | <br> <br>          |
| 705:<br>Water, fresh        | -                               |                   |                            |                      | <br> <br>                  | <br>                                |          | <br> <br>            | <br> <br>               | <br> <br>          |
| 706:<br>Whitsol             | <br> <br> -<br>  B              | <br> <br> Apr-Sep |                            |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| 707:<br>Whitsol             | <br> <br> -  B                  | <br> <br> Apr-Sep |                            |                      | <br> <br>                  | <br>                                |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| 708:<br>Whitsol             | <br> <br> -<br>  B              | <br> Apr-Sep      |                            |                      | <br> <br>                  | <br>                                |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| 709:<br>Whitsol             | <br> <br> -<br>  B              | <br> <br> Apr-Sep |                            |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| 710:<br>Whitsol             | <br> <br>-  B                   | <br> <br> Apr-Sep | <br> <br>                  |                      | <br> <br>                  | <br> <br>                           |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| 711:<br>Whitsol             | <br> <br>-  B                   | <br> <br> Apr-Sep |                            |                      | <br> <br>                  | <br>                                |          | <br> <br>  None      | <br> <br>               | <br> <br>  None    |
| Doroshin                    | <br>-  D<br>                    | <br> Apr-Sep<br>  | <br> 0.0-1.0<br>           | <br> 5.0-6.0<br>     | <br> Apparent<br>          | <br> 0.1-0.8  <br>                  |          | <br>  Rare<br>       | <br> <br>               | <br>  None<br>     |
|                             | . [                             |                   |                            | .                    |                            | i                                   |          |                      | <u> </u>                |                    |

Table 13. Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

| Map symbol                          | Restrict           | ive layer      |                | Subsid  | lence            | Potential           | Risk of co             | orrosion               |
|-------------------------------------|--------------------|----------------|----------------|---------|------------------|---------------------|------------------------|------------------------|
| and soil name                       | <br>  Kind         | Depth to top   | <br>  Hardness | Initial | <br>  Total      | frost<br>  action   | Uncoated steel         | Concrete               |
|                                     | <br> <br>          | <br>  In.      |                | In.     | <br>  In.        |                     | <br> <br>              | <br> <br>              |
| 501:<br>Aquic Cryofluvents          | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate<br> | <br> <br> Moderate<br> |
| 502:<br>Aquic Cryofluvents, shallow | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate<br> | <br> <br> Moderate<br> |
| 503:<br>Badland, sea cliffs         | <br> none          | <br> <br>      | <br> <br>      |         | <br> <br>        | <br> <br>           | <br> <br>              | <br> <br>              |
| 504:<br>Badland, sea cliffs         | <br> <br> none     | <br> <br>      | <br> <br>      |         | <br> <br>        | <br> <br>           | <br> <br>              | <br> <br>              |
| Typic Cryorthents                   | <br> none          | <br>           | <br>           | 0       | 0                | <br> Moderate       | <br> Moderate          | <br> Moderate          |
| 505:<br>Beaches                     | <br> <br> none     | <br> <br>      | <br>           |         | <br> <br>        | <br> <br>           | <br> <br>              | <br> <br>              |
| 506:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| 507:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br>           | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| 508:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br>           | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| 509:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| Mutnala                             | <br> none          | <br>           | <br>           | 0       | 0                | <br>  High          | l<br>  High            | l<br>  High<br>        |
| 510:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br>           | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| Smokey Bay                          | <br> none          | <br>           | <br>           | 0       | 0                | High                | <br> Moderate          | <br> Moderate          |
| 511:<br>Beluga                      | <br> <br> none     | <br> <br>      | <br>           | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate     | <br> <br> Moderate     |
| Smokey Bay                          | <br> none          | <br>           | <br>           | 0       | <br>  0          | <br>  High          | <br> Moderate          | <br> Moderate          |
| 512:<br>Benka                       | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br>  High        | <br> <br>  High        |
| 513:<br>Benka                       | <br> <br> none     | <br> <br>      | <br>           | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br>  High        | <br> <br>  High        |
| 514:<br>Benka                       | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br>  High        | <br> <br>  High        |
| 515:<br>Benka                       | <br> <br> none     | <br> <br>      | <br> <br>      | 0       | <br> <br>  0     | <br> <br>  High     | <br> <br>  High        | <br> <br>  High        |
| 516:<br>Benka                       | <br> <br> none<br> | <br> <br> <br> | <br> <br> <br> | 0       | <br> <br>  0<br> | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br>    |

Table 13. Soil Features—Continued

| Map symbol                         | Restrict           | ive layer      |                | Subsidence          |                      | Potential<br>  for  | Risk of corrosion      |                        |
|------------------------------------|--------------------|----------------|----------------|---------------------|----------------------|---------------------|------------------------|------------------------|
| and soil name                      | <br> <br>  Kind    | Depth to top   | <br>  Hardness | <br> <br>  Initial  | <br>  Total          | frost action        | Uncoated steel         | Concrete               |
|                                    | <br> <br>          | <br>  In.<br>  | <br> <br>      | <br>  In.           | <br>  In.<br>        | <br> <br>           | <br> <br>              | <br> <br>              |
| 517: Benka, strongly sloping       | <br> none          | <br>           | <br>           | 0                   | <br>  0              | <br>  High          | <br>  High             | <br>  High             |
| Benka, gently sloping              | <br> none          | <br>           | <br>           | 0                   | <br>  0              | <br>  High          | <br>  High             | <br>  High             |
| 518:<br>Boxcar                     | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0        | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High        |
| 519:<br>Boxcar                     | <br> <br> none<br> | <br> <br>      | <br> <br>      | <br> <br>  0        | <br> <br>  0         | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High        |
| 520:<br>Boxcar                     | <br> <br> none<br> | <br> <br>      | <br> <br>      | <br> <br>  0        | <br> <br>  0         | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 521:<br>Boxcar, cool               | <br> none<br>      | <br> <br> <br> | <br> <br>      | <br> <br>  0        | <br> <br>  0         | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 522:<br>Boxcar, cool               | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 523:<br>Chenega                    | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  Low<br>       | <br> Moderate<br>      | <br> Moderate<br>      |
| 524:<br>Chenega, cool              | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  Low<br>       | <br> Moderate<br>      | <br> Moderate<br>      |
| 525: Chenega, occasionally flooded | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  Low<br>       | <br> Moderate<br>      | <br> Moderate<br>      |
| 526:<br>Chulitna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 527:<br>Chulitna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 528:<br>Chulitna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 529:<br>Chulitna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 530:<br>Chunilna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 531:<br>Chunilna                   | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  0<br>         | <br>  0<br>          | <br>  High<br>      | <br>  High<br>         | <br>  High<br>         |
| 532:<br>Chunilna, cool             | <br> <br> none<br> | <br>           | <br>           | <br>  0<br>         | <br>  0              | <br> <br>  High     | <br> <br>  High        | <br>  High             |
| 533:<br>Chunilna, cool             | <br> none<br>      | <br> <br>      | <br> <br>      | <br> <br>  0        | <br> <br>  0         | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 534:<br>Clam Gulch                 | <br> none          | <br> <br>      | <br>           | <br> <br>  0        | <br> <br>  0         | <br> <br>  High<br> | <br> <br> Moderate<br> | <br> <br>  High<br>    |
| 535:<br>Clunie                     | <br> <br> none<br> | <br> <br> <br> | <br> <br>      | <br> <br>  8-16<br> | <br> <br>  16-31<br> | <br> <br>  High<br> | <br> <br> Moderate<br> | <br> <br> Moderate<br> |

Table 13. Soil Features—Continued

| Map symbol                           | Restri             | ctive layer  | •         | Subsic             | lence        | Potential<br>  for | Risk of co      | prrosion             |
|--------------------------------------|--------------------|--------------|-----------|--------------------|--------------|--------------------|-----------------|----------------------|
| and soil name                        | Kind               | Depth to top | Hardness  | <br> <br>  Initial | <br>  Total  | frost action       | Uncoated steel  | Concrete             |
|                                      |                    | <br>  In.    | <br> <br> | <br>  In.          | <br>  In.    | <br> <br>          |                 | <br> <br>            |
| 536:<br>Coal Creek                   | <br> <br> none<br> |              | <br> <br> | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High | l<br> <br>  High<br> |
| 537:<br>Coal Creek                   | <br> none<br>      |              | <br> <br> | <br> <br>  0       | <br> <br>  0 | <br>  High         | <br>  High      | <br> <br>  High<br>  |
| 538:<br>Coal Creek                   | <br> none<br>      | <br>         | <br> <br> | <br>  0            | <br>  0<br>  | High               | <br>  High      | <br>  High<br>       |
| 539:<br>Cohoe                        | <br> none<br>      |              | <br> <br> | <br>  0            | <br>  0      | High               | <br>  High      | <br>  High<br>       |
| 540:<br>Cohoe                        | <br> none<br>      | <br>         | <br> <br> | <br>  0<br>        | <br>  0<br>  | High               | <br>  High      | <br>  High<br>       |
| 541:<br>Cohoe                        | <br> none<br>      |              | <br> <br> | <br>  0<br>        | <br>  0<br>  | <br>  High<br>     | <br>  High<br>  | <br>  High<br>       |
| 542:<br>Cohoe                        | <br> none<br>      | <br>         | <br> <br> | <br>  0<br>        | <br>  0<br>  | High               | <br>  High<br>  | <br>  High<br>       |
| 543:<br>Cohoe                        | <br> none<br>      |              | <br> <br> | <br>  0            | 0            | High               | <br>  High      | <br>  High<br>       |
| 544:<br>Cohoe                        | <br> none          | <br>         | <br> <br> | <br>  0            | 0            | <br>  High         | <br>  High      | <br> <br>  High      |
| 545:<br>Cohoe, dry                   | <br> none          |              | <br> <br> | <br> <br>  0       | 0            | <br>  High         | <br>  High      | <br> <br>  High      |
| 546:<br>Cohoe, dry                   | <br>  none         |              | <br> <br> | <br> <br>  0       | <br>  0      | <br> <br>  High    | <br> <br>  High | <br> <br>  High<br>  |
| 547:<br>Cohoe, dry                   | <br> none          |              | <br> <br> | <br> <br>  0       | 0            | <br>  High         | <br>  High      | <br> <br>  High      |
| 548:<br>Cohoe, dry                   | <br>  none         |              | <br> <br> | <br> <br>  0       | <br>  0      | <br> <br>  High    | <br> <br>  High | <br> <br>  High<br>  |
| 549:<br>Cohoe, dry                   | <br> none          |              | <br> <br> | <br> <br>  0       | 0            | <br>  High         | <br>  High      | <br> <br>  High      |
| 550:<br>Cohoe, dry                   | <br>  none         |              | <br> <br> | <br> <br>  0       | <br>  0      | <br> <br>  High    | <br> <br>  High | <br> <br>  High<br>  |
| 551:<br>Cohoe, moderately steep      | <br>  none         |              | <br> <br> | <br> <br>  0       | 0            | <br> <br>  High    | <br> <br>  High | <br> <br>  High      |
| Cohoe, gently sloping                | none               |              | <br>      | 0                  | 0            | High               | High            | <br>  High           |
| 552:<br>Cohoe, dry, moderately steep | <br>  none         |              | <br> <br> | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High | <br> <br>  High      |
| Cohoe, dry, gently sloping           | none               |              | <br>      | 0                  | 0            | <br>  High         | <br>  High      | <br>  High           |
| 553:<br>Cohoe, dry                   | <br> <br> none     | <br> <br>    | <br> <br> | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High | <br> <br>  High      |
| Kenai                                | <br> none<br>      |              | <br> <br> | <br>  0<br>        | <br>  0<br>  | <br> Moderate<br>  | <br>  High<br>  | <br>  High<br>       |

Table 13. Soil Features—Continued

| Map symbol            | Restrict           | ive layer      |                | Subsid               | lence                | Potential           | Risk of corrosion      |                     |
|-----------------------|--------------------|----------------|----------------|----------------------|----------------------|---------------------|------------------------|---------------------|
| and soil name         | <br> <br>  Kind    | Depth to top   | <br>  Hardness | <br> <br>  Initial   | <br>  Total          | frost<br>  action   | Uncoated steel         | Concrete            |
|                       |                    | <br>  In.      | <br> <br>      | <br>  In.            | <br>  In.            |                     | <br> <br>              | <br> <br>           |
| 554:<br>Cohoe, dry    | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | l<br> <br>  High       | <br> <br>  High     |
| Kenai                 | <br> none          | <br>           | <br>           | <br>  0              | <br>  0              | <br> Moderate       | <br>  High             | <br>  High          |
| 555:<br>Cohoe, dry    | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High     |
| Nikolai               | <br> none          | <br>           | <br>           | <br>  18-26          | <br>  26-35          | <br>  High          | <br>  High             | <br>  High          |
| 556:<br>Cohoe, dry    | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High     |
| Nikolai               | <br> none          | <br>           | <br>           | <br>  18-26          | <br>  26-35          | <br>  High          | <br>  High             | <br>  High          |
| 557:<br>Cytex Creek   | <br> <br> none<br> | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High<br> | <br> <br> Moderate<br> | <br> <br>  High<br> |
| 558:<br>Doroshin      | <br> <br> none<br> | <br> <br>      | <br> <br> <br> | <br> <br>  12-25<br> | <br> <br>  24-36<br> | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br> |
| 559:<br>Doroshin      | <br> none<br>      | <br> <br>      | <br> <br>      | <br>  12-25<br>      | <br> <br>  24-36<br> | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br> |
| 560:<br>Dystrocryepts | <br> <br> none<br> | <br>           | <br> <br>      | 0                    | <br>  0              | Low                 | <br> <br> Moderate     | <br>  High          |
| Typic Cryorthents     | <br> none<br>      | <br>           | <br>           | 0                    | 0                    | <br> Moderate       | <br> Moderate          | <br> Moderate       |
| Iliamna, cool         | I<br> none<br>I    | <br> <br>      | <br> <br>      | 0                    | 0                    | <br>  High          | l<br>  High<br>        | l<br>  High<br>     |
| 561:<br>Foreland      | <br> <br> none     | <br> <br>      | <br> <br>      | 0                    | <br> <br>  0         | <br> <br>  High     | l<br> <br>  High       | <br> <br>  High     |
| 562:<br>Foreland      | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High     |
| Soldotna              | <br> none          | <br>           | <br>           | 0                    | <br>  0              | <br>  High          | <br>  High             | <br>  High          |
| Starichkof            | <br> none          | <br>           | <br>           | <br>  41             | <br>  60             | <br>  High          | <br>  High<br>         | <br>  High<br>      |
| 563:<br>Pits, gravel  | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>            | <br> <br>            | <br> <br>           | <br> <br>              | <br> <br>           |
| 564:<br>Iliamna       | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High     |
| 565:<br>Iliamna       | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0         | <br> <br>  0         | <br> <br>  High     | <br> <br>  High        | <br> <br>  High     |
| 566:<br>Iliamna       | <br> <br> none<br> | <br> <br> <br> | <br> <br> <br> | <br> <br>  0         | <br> <br>  0         | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br> |
| 567:<br>Iliamna, cool | <br> <br> none<br> | <br> <br>      | <br> <br> <br> | <br> <br>  0         | <br> <br>  0<br>     | <br> <br>  High<br> | <br> <br>  High<br>    | <br> <br>  High<br> |
| 568:<br>Island        | <br> <br> none<br> | <br> <br>      | <br> <br> <br> | <br> <br>  0<br>     | <br> <br>  0<br>     | <br> <br>  High<br> | <br> <br> Moderate<br> | <br> Moderate<br>   |

Table 13. Soil Features—Continued

| Map symbol                 | Restrict           | ive layer       |                | Subsid  | lence        | Potential<br>  for | Risk of corrosion  |                    |  |
|----------------------------|--------------------|-----------------|----------------|---------|--------------|--------------------|--------------------|--------------------|--|
| and soil name              | <br>  Kind         | Depth<br>to top | <br>  Hardness | Initial | <br>  Total  | frost<br>  action  | Uncoated steel     | Concrete           |  |
|                            | <br> <br>          | In.             | <br> <br>      | In.     | <br>  In.    | <br> <br>          |                    |                    |  |
| 569:<br>Island             | <br> <br> none<br> |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> Moderate      | <br> <br> Moderate |  |
| 570:<br>Island             | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> Moderate      | <br> <br> Moderate |  |
| 571:<br>Island             | <br> <br> none<br> |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br> Moderate | <br> <br> Moderate |  |
| 572:<br>Island, forested   | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br> Moderate | <br> <br> Moderate |  |
| 573:<br>Kachemak           | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 574:<br>Kachemak           | <br> <br> none<br> |                 | <br> <br>      | 0       | <br> <br>  0 | l<br> <br>  High   | <br> <br>  High    | <br> <br>  High    |  |
| 575:<br>Kachemak           | <br> <br> none<br> |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 576:<br>Kachemak           | <br> <br> none<br> |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 577:<br>Kachemak           | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 578:<br>Kachemak, cool     | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 579:<br>Kachemak, cool     | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 580:<br>Kachemak, cool     | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 581:<br>Kachemak, cool     | <br> <br> none     |                 | <br>           | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 582:<br>Kachemak, cool     | <br> <br> none     |                 | <br>           | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 583:<br>Kachemak, forested | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 584:<br>Kachemak, forested | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 585:<br>Kachemak, forested | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| 586:<br>Kachemak, cool     | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| Snowdance                  | <br> none          |                 | <br>           | 0       | <br>  0      | <br>  High         | <br>  High         | <br>  High         |  |
| 587:<br>Kachemak, cool     | <br> <br> none     |                 | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High    |  |
| Snowdance                  | <br> none<br>      | <br> <br>       | <br> <br>      | 0       | <br>  0<br>  | <br>  High<br>     | High               | <br>  High<br>     |  |

Table 13. Soil Features—Continued

| Map symbol                          | Restrict           | ive layer       |                | Subsid             | lence        | Potential<br>  for | Risk of corrosion  |                 |
|-------------------------------------|--------------------|-----------------|----------------|--------------------|--------------|--------------------|--------------------|-----------------|
| and soil name                       | <br>               | Depth<br>to top | <br>  Hardness | <br> <br>  Initial | <br>  Total  | frost<br>  action  | Uncoated steel     | <br>  Concrete  |
|                                     |                    | In.             |                | <br>  In.          | <br>  In.    |                    |                    |                 |
| 588:<br>Kachemak, cool              | <br> <br> none     |                 | <br>           | 0                  | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| Snowdance                           | <br> none          |                 | <br>           | 0                  | <br>  0      | <br>  High         | <br>  High         | <br>  High      |
| 589:<br>Kalifonsky                  | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| 590:<br>Kalifonsky                  | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| 591:<br>Kalifonsky                  | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| Typic Cryorthents                   | <br> none          |                 | <br>           | 0                  | 0            | <br> Moderate      | <br> Moderate      | <br> Moderate   |
| 592:<br>Karluk                      | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br> Moderate | <br> <br>  High |
| 593:<br>Kashwitna                   | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| 594:<br>Kashwitna                   | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| 595:<br>Kashwitna                   | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| 596:<br>Kashwitna, moderately steep | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  High    | <br> <br>  High    | <br> <br>  High |
| Kashwitna, strongly sloping         | l<br> none         |                 | <br>           | 0                  | 0            | <br>  High         | <br>  High         | <br>  High      |
| 597:<br>Kenai                       | <br> <br> none<br> |                 | <br>           | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| 598:<br>Kenai                       | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| 599:<br>Kenai                       | <br> <br> none<br> |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| 600:<br>Kenai                       | <br> <br> none<br> |                 | <br>           | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| 601:<br>Kenai                       | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| 602:<br>Kenai, moderately steep     | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| Kenai, gently sloping               | <br> none          |                 | <br>           | <br>  0            | <br>  0      | <br> Moderate      | <br>  High         | <br>  High      |
| 603:<br>Kenai                       | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br> Moderate | <br> <br>  High    | <br> <br>  High |
| Starichkof                          | <br> none          |                 | <br>           | 41                 | <br>  60     | <br>  High         | <br>  High         | <br>  High      |
| 604:<br>Kichatna                    | <br> <br> none     |                 | <br> <br>      | <br> <br>  0       | <br> <br>  0 | <br> <br>  Low     | <br> <br>  High    | <br> <br>  High |

Table 13. Soil Features—Continued

| Map symbol                  | Restrict                  | ive layer           |                    | Subsid  | lence            | Potential<br>  for     | Risk of co          | orrosion            |
|-----------------------------|---------------------------|---------------------|--------------------|---------|------------------|------------------------|---------------------|---------------------|
| and soil name               | <br> <br>  Kind           | Depth to top        | <br>  Hardness     | Initial | <br>  Total      | frost action           | Uncoated steel      | Concrete            |
|                             |                           | <br>  In.<br>       | <br> <br>          | In.     | <br>  In.        | <br> <br>              | <br> <br>           | <br> <br>           |
| 605:<br>Kichatna            | <br> <br> none<br>        | <br> <br>           | <br> <br>          | 0       | <br> <br>  0     | <br> <br>  Low         | <br> <br>  High<br> | <br> <br>  High<br> |
| 606:<br>Kichatna            | <br> <br> none<br>        | <br> <br>           | <br>               | 0       | <br>  0<br>      | <br> <br>  Low         | <br> <br>  High<br> | <br> <br>  High<br> |
| 607:<br>Kichatna            | <br> none<br>             | <br> <br>           | <br>               | 0       | <br>  0<br>      | Low                    | <br> <br>  High<br> | <br> <br>  High<br> |
| 608:<br>Kichatna            | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br>  0<br>      | Low                    | <br> <br>  High<br> | <br>  High<br>      |
| 609:<br>Kichatna            | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br>  0<br>      | <br>  Low<br>          | <br> <br>  High<br> | <br>  High<br>      |
| Killey                      | none                      | i                   | <br>               | 0       | 0                | High                   | High                | High                |
| 610:<br>Kidazqeni           | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br>  0<br>      | <br>  Low<br>          | <br> Moderate<br>   | <br> Moderate<br>   |
| 611:<br>Killey              | <br> none<br>             | j<br> <br>          | <br> <br>          | 0       | j<br>  0<br>     | <br>  High<br>         | <br>  High<br>      | <br>  High<br>      |
| Moose River                 | none<br>I                 | j<br>i              | j<br>i             | 0       | j 0<br>I         | High                   | i<br>  High<br>     | i<br>  High<br>     |
| 612:<br>Liten               | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br>  0<br>      | <br>  Low<br>          | <br>  High<br>      | <br>  High<br>      |
| 613:<br>Lithic Haplocryands | <br> Bedrock (lithic)<br> | <br>  8-19<br>      | <br> Indurated<br> | 0       | <br>  0<br>      | <br>  High<br>         | <br>  High<br>      | <br>  High<br>      |
| Alic Haplocryands           | Bedrock (lithic)          | 22-60               | Indurated          | 0       | 0                | High                   | High                | High                |
| Rock outcrop                | none                      | i                   | <br>               |         | i                | <br>                   | ļ                   | <br>                |
| 614:<br>Lithic Haplocryands | <br> Bedrock (lithic)     | <br> <br>  8-19<br> | <br> Indurated<br> | 0       | <br>  0<br>      | <br>  High<br>         | <br> <br>  High<br> | <br>  High<br>      |
| Alic Haplocryands           | Bedrock (lithic)          | 22-60               | Indurated          | 0       | 0                | High                   | High                | High                |
| Rock outcrop                | <br> none<br>             | <br>                | <br>               |         | <br>             | ļ                      |                     |                     |
| 615:<br>Longmare            | <br> <br> none<br>        | <br>                | <br>               | 0       | <br> <br>  0     | <br> <br> Moderate<br> | <br> <br>  High     | <br> <br>  High     |
| 616:<br>Longmare            | <br> none<br>             | <br> <br>           | <br>               | 0       | <br>  0<br>      | <br> Moderate<br>      | <br> <br>  High<br> | <br> <br>  High<br> |
| 617:<br>Mutnala             | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br> <br>  0     | <br> <br>  High<br>    | <br> <br>  High<br> | <br> <br>  High<br> |
| 618:<br>Mutnala             | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br> <br>  0<br> | <br> <br>  High<br>    | <br> <br>  High<br> | <br> <br>  High<br> |
| 619:<br>Mutnala             | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br> <br>  0     | <br> <br>  High<br>    | <br> <br>  High<br> | <br> <br>  High<br> |
| 620:<br>Mutnala             | <br> none<br>             | <br> <br>           | <br> <br>          | 0       | <br>  0<br>      | <br> <br>  High<br>    | <br>  High<br>      | <br>  High<br>      |

Table 13. Soil Features—Continued

| Map symbol                               | Restrict            | ive layer     |                | Subsid                 | lence            | Potential<br>  for  | Risk of co         | rrosion                |
|------------------------------------------|---------------------|---------------|----------------|------------------------|------------------|---------------------|--------------------|------------------------|
| and soil name                            | <br>  Kind          | Depth to top  | <br>  Hardness | <br> <br>  Initial<br> | <br>  Total      | frost action        | Uncoated steel     | Concrete               |
|                                          |                     | <br>  In.<br> | <br> <br>      | <br>  In.              | <br>  In.        | <br> <br>           |                    | <br> <br>              |
| 621:<br>Mutnala                          | <br> <br> none<br>  | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br>  High    | l<br> <br>  High<br>   |
| 622:<br>Mutnala                          | I<br> <br> none<br> | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br>  High    | I<br> <br>  High<br>   |
| 623:<br>Mutnala                          | <br> <br> none      | <br>          | <br> <br>      | 0                      | <br>  0          | <br> <br>  High     | <br> <br>  High    | <br> <br>  High        |
| Starichkof                               | <br> none           | <br>          | <br>           | 41                     | 60               | <br>  High          | <br>  High         | l<br>  High<br>        |
| Slikok                                   | <br> none           | <br>          | <br>           | <br>  4-12             | 6-17             | <br>  High          | <br>  High         | l<br>  High            |
| 624:<br>Naptowne                         | <br> <br> none<br>  | <br> <br>     | <br> <br> <br> | <br> <br>  0           | <br> <br>  0     | <br> <br>  High<br> | <br> <br>  High    | l<br> <br>  High<br>   |
| 625:<br>Naptowne                         | <br> none<br>       | <br> <br>     | <br> <br>      | <br>  0<br>            | <br>  0<br>      | <br>  High<br>      | <br>  High<br>     | <br> <br>  High<br>    |
| 626:<br>Naptowne                         | <br> none<br>       | <br> <br>     | <br> <br>      | <br>  0<br>            | <br>  0          | <br> <br>  High<br> | <br>  High         | <br> <br>  High<br>    |
| 627:<br>Naptowne                         | <br> none<br>       | <br>          | <br>           | <br>  0<br>            | <br>  0          | <br> <br>  High     | <br>  High         | <br> <br>  High        |
| 628:<br>Naptowne                         | <br> <br> none<br>  | <br>          | <br> <br>      | <br> <br>  0           | <br>  0          | <br> <br>  High     | <br>  High         | <br> <br>  High        |
| 629:<br>Naptowne                         | <br> <br> none<br>  | <br>          | <br>           | <br> <br>  0           | <br>  0          | <br> <br>  High     | <br>  High         | <br> <br>  High<br>    |
| 630:<br>Naptowne, moderately steep       | <br> <br> none<br>  | <br> <br>     | <br> <br>      | <br> <br>  0           | 0                | <br> <br>  High     | <br> <br>  High    | l<br> <br>  High       |
| Naptowne, strongly sloping               | <br> none<br>       |               | <br>           | 0                      | 0                | <br>  High          | High               | l<br>  High            |
| 631:<br>Naptowne, strongly sloping       | <br> <br> none      | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br>  High    | <br> <br>  High        |
| Naptowne, gently sloping                 | <br> none           | <br>          | <br>           | 0                      | 0                | <br>  High          | <br>  High         | l<br>  High<br>        |
| 632:<br>Niklason                         | <br> <br> none<br>  | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br> Moderate  | <br> <br> Moderate | <br> <br> Moderate<br> |
| 633:<br>Nikolaevsk                       | <br> <br> none      | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate | <br> <br>  High        |
| 634:<br>Nikolaevsk                       | <br> <br> none      | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate | <br> <br>  High        |
| 635:<br>Nikolaevsk                       | I<br> <br> none<br> | <br> <br>     | <br> <br>      | <br> <br>  0           | <br> <br>  0     | <br> <br>  High     | <br> <br> Moderate | <br> <br>  High<br>    |
| 636:<br>Nikolai                          | I<br> <br> none<br> | <br> <br>     | <br> <br>      | <br> <br>  18-26       | <br> <br>  26-35 | <br> <br>  High     | <br> <br>  High    | <br> <br>  High<br>    |
| 637:<br>Nikolai, somewhat poorly drained | I<br> <br> none<br> | <br> <br>     | <br> <br>      | <br> <br>  18-26       | <br> <br>  26-35 | <br> <br>  High     | <br> <br>  High    | <br> <br>  High        |
| Tuxedni                                  | I<br> none          | <br>          | <br>           | <br>  0                | <br>  0          | <br>  High          | <br>  High         | <br>  High             |

Table 13. Soil Features—Continued

| Map symbol                        | Restrict           | ive layer      |                | Subsic             | lence            | Potential              | Risk of co             | orrosion               |
|-----------------------------------|--------------------|----------------|----------------|--------------------|------------------|------------------------|------------------------|------------------------|
| and soil name                     | <br>  Kind         | Depth to top   | Hardness       | <br> <br>  Initial | <br>  Total      | frost action           | Uncoated steel         | Concrete               |
|                                   |                    | <br>  In.<br>  |                | <br>  In.          | <br>  In.<br>    | <br> <br>              | <br> <br>              |                        |
| 638:<br>Puntilla                  | <br> none          | <br>           | <br>           | <br>  0            | <br>  0          | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 639:<br>Puntilla                  | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 640:<br>Qutal                     | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High<br>    |
| 641:<br>Qutal                     | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 642:<br>Qutal                     | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 643:<br>Redoubt, terraces         | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 644:<br>Redoubt                   | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 645:<br>Redoubt                   | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 646:<br>Redoubt, cool             | <br> <br>  none    | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 647:<br>Redoubt, moderately steep | <br> <br>  none    | <br> <br>      | <br> <br>      | 0                  | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| Redoubt, gently sloping           | <br> none          | <br>           | <br>           | 0                  | <br>  0          | <br>  High             | <br>  High             | <br>  High             |
| 648:<br>Redoubt, cool             | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| Tuxedni                           | l<br>Inone         | <br> <br>      | <br> <br>      | <br>  0            | 0                | <br>  High             | <br>  High             | l<br>  High            |
| 649:<br>Riverwash                 | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>          | <br> <br>        | <br> <br>              |                        |                        |
| 650:<br>Salamatof                 | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  42      | <br> <br>  60    | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| Doroshin                          | I<br>Inone         | <br> <br>      | <br>           | <br>  12-25<br>    | <br>  24-36      | l<br>  High            | <br>  High             | l<br>  High            |
| 651:<br>Salamatof                 | <br> none          | <br> <br>      | <br> <br>      | <br> <br>  42      | <br> <br>  60    | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 652:<br>Slikok                    | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  4-12    | <br> <br>  6-17  | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 653:<br>Slikok                    | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  4-12    | <br> <br>  6-17  | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 654:<br>Smithfha                  | <br> <br> none     | <br> <br>      | <br> <br>      | <br> <br>  0       | <br> <br>  0     | <br> <br> Moderate     | <br> <br> Moderate     | <br> <br> Moderate     |
| 655:<br>Smithfha                  | <br> <br> none<br> | <br> <br> <br> | <br> <br> <br> | <br> <br>  0<br>   | <br> <br>  0<br> | <br> <br> Moderate<br> | <br> <br> Moderate<br> | <br> <br> Moderate<br> |

Table 13. Soil Features—Continued

| And soil name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Map symbol               | Restrict           | ive layer |                | Subsid  | ence         | Potential<br>  for  | Risk of co               | rrosion                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------|-----------|----------------|---------|--------------|---------------------|--------------------------|----------------------------------|
| 656:         Smokey Bay         none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          | <br> <br>  Kind    |           | <br>  Hardness | Initial | <br>  Total  | frost               |                          | Concrete                         |
| Smokey Bay         none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          | <br> <br>          | In.       | <br> <br>      | In.     | <br>  In.    | <br> <br>           | <br> <br>                | <br> <br>                        |
| 658: Snowdance         none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | <br> <br> none<br> |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | I<br> <br> Moderate<br>  | I<br> <br> Moderate<br>          |
| Snowdance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | <br> <br> none<br> |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | ।<br> <br> Moderate<br>। | ı<br> <br> Moderate<br>          |
| Soldotna         none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          | <br> <br> none<br> |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High<br> | <br> <br>  High<br>      | I<br> <br>  High<br>             |
| Soldotna         none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          | <br> <br> none<br> |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High<br> | <br> <br>  High<br>      | <br> <br>  High<br>              |
| Soldotna         none           0         0         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         Hig                                                                                                                                                                                                                                  |                          | <br> <br> none<br> |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High<br> | <br> <br>  High<br>      | <br> <br>  High<br>              |
| Soldotna         none          0         0         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         Hi                                                                                                                                                                                                                       |                          | <br> <br> none<br> |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High<br> | <br> <br>  High<br>      | <br> <br>  High<br>              |
| Soldotna, sandy substratum         none           0         0         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High <td></td> <td> <br/> <br/> none<br/> </td> <td></td> <td> <br/> </td> <td>0</td> <td>0</td> <td> <br/> <br/>  High<br/> </td> <td> <br/> <br/>  High<br/> </td> <td>l<br/> <br/>  High<br/> </td>                          |                          | <br> <br> none<br> |           | <br>           | 0       | 0            | <br> <br>  High<br> | <br> <br>  High<br>      | l<br> <br>  High<br>             |
| Soldotna, sandy substratum         none           0         0         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High         High <td></td> <td> <br/> <br/> none<br/> </td> <td></td> <td> <br/> <br/> </td> <td>0</td> <td> <br/> <br/>  0</td> <td> <br/> <br/>  High</td> <td>I<br/> <br/>  High<br/> </td> <td>ı<br/> <br/>  High<br/><sub> </sub></td> |                          | <br> <br> none<br> |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | I<br> <br>  High<br>     | ı<br> <br>  High<br><sub> </sub> |
| Soldotna, sandy substratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | <br> <br> none<br> |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | I<br> <br>  High<br>     | I<br> <br>  High<br>I            |
| Soldotna, sandy substratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | <br> <br> none     |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | l<br> <br>  High         | I<br> <br>  High<br>             |
| Soldotna, strongly sloping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | <br> <br> none     |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | <br> <br>  High                  |
| 668: Soldotna, sandy substratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | <br> <br> none     |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | l<br> <br>  High                 |
| Soldotna, sandy substratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Soldotna, gently sloping | <br> none          |           | <br>           | 0       | 0            | l<br>  High         | l<br>  High<br>          | l<br>  High<br>'                 |
| 669: Soldotna, sandy substratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | <br> <br> none     |           | <br>           | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | <br> <br>  High                  |
| Soldotna, sandy substratum         none          0         0         High         High         High           Kenai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Kenai                    | <br> none          |           | <br>           | 0       | 0            | <br> Moderate       | l<br>  High<br>          | l<br>  High<br>:                 |
| 670: Soldotna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | <br> <br> none     |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | <br> <br>  High                  |
| Soldotna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Kenai                    | <br> none          |           | <br>           | 0       | 0            | <br> Moderate       | <br>  High               | <br>  High                       |
| 671:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          | <br> <br> none     |           | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | <br> <br>  High                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Kichatna                 | <br> none          |           | <br>           | 0       | <br>  0      | <br>  Low           | <br>  High               | <br>  High                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | <br> <br> none     | <br>      | <br> <br>      | 0       | <br> <br>  0 | <br> <br>  High     | <br> <br>  High          | <br> <br>  High                  |
| Kichatna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | j                  |           | <br> <br>      |         | İ            | İ                   | j                        | j                                |

Table 13. Soil Features—Continued

| Map symbol                   | Rest               | rictive layer | •              | Subsid            | lence         | Potential<br>  for  | Risk of co      | rrosion              |
|------------------------------|--------------------|---------------|----------------|-------------------|---------------|---------------------|-----------------|----------------------|
| and soil name                | <br>  Kind         | Depth to top  | <br>  Hardness | <br>  Initial     | <br>  Total   | frost action        | Uncoated steel  | Concrete             |
|                              |                    | In.           |                | <br>  In.         | <br>  In.     |                     |                 |                      |
| 672:<br>Soldotna             | <br> none          |               | <br>           | <br> <br>  0      | <br>  0       | <br> <br>  High     | <br>  High      | <br> <br>  High      |
| Nikolai                      | none               |               | <br>           | <br>  18-26       | 26-35         | <br>  High          | <br>  High      | l<br>  High<br>      |
| 673:<br>Spenard              | <br> <br> none     |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br>  High     | <br> <br>  High | <br> <br>  High<br>  |
| 674:<br>Spenard              | <br> <br> none<br> |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br>  High<br> | <br> <br>  High | <br> <br>  High<br>  |
| 675:<br>Spenard              | <br> none<br>      |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br>  High<br> | <br> <br>  High | <br> <br>  High<br>  |
| 676:<br>Starichkof           | none               |               | <br>           | <br> <br>  41     | <br>  60      | <br>  High          | High            | <br>  High           |
| Doroshin                     | none               |               | <br>           | <br>  12-25       | <br>  24-36   | <br>  High          | <br>  High      | <br>  High           |
| 677:<br>Starichkof           | <br> <br> none     |               | <br> <br>      | <br> <br>  41     | <br> <br>  60 | <br> <br>  High     | <br> <br>  High | <br> <br>  High      |
| 678:<br>Starichkof           | <br> <br> none     |               | <br> <br>      | <br> <br>  41     | <br> <br>  60 | <br> <br>  High<br> | <br> <br>  High | l<br> <br>  High<br> |
| 679:<br>Starichkof, forested | <br>  none<br>     |               | <br> <br>      | <br> <br>  41<br> | <br> <br>  60 | <br> <br>  High<br> | <br> <br>  High | <br> <br>  High<br>  |
| 680:<br>Starichkof           | none               |               | <br>           | <br> <br>  41     | <br>  60      | <br> <br>  High     | <br> <br>  High | <br> <br>  High      |
| Slikok                       | none               |               | <br>           | <br>  4-12        | 6-17          | <br>  High          | <br>  High      | l<br>  High          |
| Naptowne                     | none               |               | <br>           | 0                 | 0             | <br>  High          | <br>  High      | l<br>  High          |
| 681:<br>Starichkof           | <br> <br> none     |               | <br>           | <br> <br>  41     | <br> <br>  60 | <br> <br>  High     | <br> <br>  High | <br> <br>  High      |
| Spenard                      | none               |               | <br>           | 0                 | 0             | <br>  High          | High            | l<br>  High          |
| 682:<br>Susitna              | <br> <br> none     |               | <br>           | <br> <br>  0      | <br> <br>  0  | <br> <br> Moderate  | <br> <br>  High | <br> <br>  High      |
| Riverwash                    | none               |               | <br>           | <br>              |               |                     |                 | <br>                 |
| 683:<br>Susitna              | <br> <br> none     |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br> Moderate  | <br> <br>  High | <br> <br>  High      |
| 684:<br>Talkeetna            | <br> <br> none     |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br>  High     | <br> <br>  High | <br> <br>  High      |
| 685:<br>Talkeetna            | <br> <br> none     |               | <br> <br>      | <br> <br>  0      | <br> <br>  0  | <br> <br>  High<br> | <br> <br>  High | <br> <br>  High<br>  |
| 686:<br>Talkeetna            | <br>  none         |               | <br>           | <br> <br>  0      | <br> <br>  0  | <br> <br>  High     | <br> <br>  High | <br> <br>  High      |
| Starichkof                   | <br>Inone          |               | <br>           | <br>  41          | <br>  60      | <br>  High          | <br>  High      | <br>  High           |

Table 13. Soil Features—Continued

| Map symbol                   | Restrict              | ive layer       |                    | Subsid             | lence               | Potential              | Risk of co             | orrosion               |
|------------------------------|-----------------------|-----------------|--------------------|--------------------|---------------------|------------------------|------------------------|------------------------|
| and soil name                | <br>  Kind            | Depth to top    | Hardness           | <br> <br>  Initial | <br>  Total         | frost<br>  action      | Uncoated steel         | Concrete               |
|                              | <br> <br>             | <br>  In.       | <br> <br>          | <br>  In.          | <br>  In.<br>       | <br> <br>              | <br> <br>              | <br> <br>              |
| 687:<br>Tangerra             | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 688:<br>Beaches, tidal flats | <br> <br> none        | <br> <br>       | <br> <br>          | <br> <br>          | <br> <br>           | <br> <br>              | <br>                   | <br>                   |
| 689:<br>Tlikakila            | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High<br>    | <br> <br>  High        | <br> <br>  High<br>    |
| 690:<br>Tlikakila            | <br> <br> none        | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 691:<br>Tlikakila            | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 692:<br>Tokositna            | <br> none<br>         | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 693:<br>Tokositna            | <br> none<br>         | <br> <br>       | <br> <br>          | <br>  0<br>        | 0                   | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 694:<br>Tokositna            | <br> none<br>         | <br> <br>       | <br> <br>          | 0                  | <br>  0             | <br>  High<br>         | <br> <br>  High<br>    | <br>  High<br>         |
| 695:<br>Truuli               | <br> none<br>         | <br> <br>       | <br> <br>          | <br>  6-10         | <br> <br>  8-14<br> | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 696:<br>Tutka                | <br> Bedrock (lithic) | 12-25           | <br> Indurated<br> | 0                  | 0                   | <br>  High             | <br> <br>  High        | <br>  High             |
| Kasitsna                     | none                  | <br> <br>       | <br> <br>          | 0                  | 0                   | High                   | High                   | <br> Moderate          |
| Rock outcrop                 | <br> none<br>         | <br>            | <br> <br>          | <br> <br>          | <br>                | <br>                   | ļ                      |                        |
| 697:<br>Tutka                | <br> Bedrock (lithic) | <br>  12-25<br> | <br> Indurated<br> | <br>  0<br>        | <br>  0             | <br>  High             | <br>  High<br>         | <br>  High<br>         |
| Portgraham                   | Bedrock (lithic)      | 20-40           | Indurated          | 0                  | 0                   | High                   | High                   | Moderate               |
| 698:<br>Tuxedni              | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 699:<br>Tuxedni              | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High        | <br> <br>  High        | <br> <br>  High        |
| 700:<br>Tuxedni, warm        | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br>  High<br>    |
| 701: Typic Cryaquents        | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  High<br>    | <br> <br>  High<br>    | <br> <br> Moderate<br> |
| 702:<br>Typic Cryopsamments  | <br> <br> none<br>    | <br> <br>       | <br> <br>          | <br> <br>  0       | <br> <br>  0        | <br> <br>  Low         | <br> <br> Moderate<br> | <br> <br>  Low<br>     |
| 703: Typic Cryorthents       | <br> none<br>         | <br> <br> <br>  | <br> <br>          | <br> <br>  0       | <br> <br>  0<br>    | <br> <br> Moderate<br> | <br> <br> Moderate<br> | <br> <br> Moderate<br> |
| 704:<br>Urban land           | <br> none<br>         | <br> <br>       | <br> <br>          | <br> <br>          | <br> <br>           | <br> <br>              | <br> <br>              | <br> <br>              |

Table 13. Soil Features—Continued

| Map symbol           | Rest      | rictive layer |           | Subsic          | dence           | Potential<br>  for | Risk of co      | rrosion              |
|----------------------|-----------|---------------|-----------|-----------------|-----------------|--------------------|-----------------|----------------------|
| and soil name        | Kind      | Depth to top  | Hardness  | <br>  Initial   | <br>  Total     | frost<br>  action  | Uncoated steel  | Concrete             |
|                      |           |               | <br> <br> | <br>  In.       | ln.             |                    |                 | <br> <br>            |
| 705:<br>Water, fresh | none      |               | <br> <br> | <br> <br>       | <br>            |                    |                 | <br> <br>            |
| 706:<br>Whitsol      | none      |               | <br> <br> | <br> <br>  0    | <br> <br>  0    | <br> <br>  High    | <br>  High      | <br> <br>  High<br>  |
| 707:<br>Whitsol      | <br> none |               | <br> <br> | <br> <br>  0    | <br> <br>  0    | <br> <br>  High    | <br>  High      | <br> <br>  High<br>  |
| 708:<br>Whitsol      | <br> none |               | <br> <br> | <br> <br>  0    | 0               | <br> <br>  High    | <br>  High      | <br> <br>  High<br>  |
| 709:<br>Whitsol      | none      |               | <br> <br> | 0               | <br>  0         | <br> <br>  High    | <br>  High      | <br> <br>  High<br>  |
| 710:<br>Whitsol      | none      |               | <br> <br> | <br> <br>  0    | 0               | <br> <br>  High    | <br> <br>  High | I<br> <br>  High<br> |
| 711:<br>Whitsol      | none      |               | <br> <br> | <br> <br>  0    | 0               | <br> <br>  High    | <br> <br>  High | l<br> <br>  High<br> |
| Doroshin             | none<br>  |               | <br> <br> | <br>  12-25<br> | <br>  24-36<br> | <br>  High<br>     | <br>  High<br>  | l<br>  High<br>      |
|                      | İ         |               | İ         |                 |                 | <u> </u>           | <u> </u>        | İ                    |

**Table 14. Land Capability** 

| Map symbol and soil name                           | <br> Land capability<br> (non-irrigated)<br> |
|----------------------------------------------------|----------------------------------------------|
| 501: Aquic Cryofluvents                            | <br> <br>  4w                                |
| 502: Aquic Cryofluvents, shallow                   | <br> <br>  4w                                |
| 503:<br>Badland, sea cliffs                        | <br> <br>  8                                 |
| 504: Badland, sea cliffs Typic Cryorthents         | <br> <br>  8<br>  7e                         |
| 505:<br>Beaches                                    | <br> <br>  8                                 |
| 506:<br>Beluga                                     | <br> <br>  5w                                |
| 507:<br>Beluga                                     | <br> <br>  5w                                |
| 508:<br>Beluga                                     | <br> <br>  5w                                |
| 509:<br>Beluga<br>Mutnala                          |                                              |
| 510:<br>Beluga<br>Smokey Bay                       | <br> <br>  5w<br>  4w                        |
| 511:<br>Beluga<br>Smokey Bay                       | <br>  5w<br>  4w                             |
| 512:<br>Benka                                      | <br> <br>  3e                                |
| 513:<br>Benka                                      | <br> <br>  3e                                |
| 514:<br>Benka                                      | <br> <br>  3e                                |
| 515:<br>Benka                                      | <br> <br>  6e                                |
| 516:<br>Benka                                      | <br> <br>  7e                                |
| 517: Benka, strongly sloping Benka, gently sloping | <br> <br>  4e<br>  3e                        |
| 518:<br>Boxcar                                     | <br> <br>  4c<br>                            |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name        | <br> Land capability<br> (non-irrigated)<br> |
|------------------------------------|----------------------------------------------|
| 519:<br>Boxcar                     | <br> <br>  6e<br>                            |
| 520:<br>Boxcar                     | <br> <br>  7e                                |
| 521:<br>Boxcar, cool               | <br> <br>  4c                                |
| 522:<br>Boxcar, cool               | <br> <br>  7e                                |
| 523:<br>Chenega                    | <br> <br>  6s                                |
| 524:<br>Chenega, cool              | <br> <br>  6s                                |
| 525: Chenega, occasionally flooded | <br> <br>  6s                                |
| 526:<br>Chulitna                   | <br>                                         |
| 527:<br>Chulitna                   | <br> <br>  3e                                |
| 528:<br>Chulitna                   | <br> <br>  4e                                |
| 529:<br>Chulitna                   | <br> <br>  6e                                |
| 530:<br>Chunilna                   | <br> <br>  5w                                |
| 531:<br>Chunilna                   | <br> <br>  6w                                |
| 532:<br>Chunilna, cool             | <br> <br> <br>  6w                           |
| 533:<br>Chunilna, cool             | <br>                                         |
| 534:<br>Clam Gulch                 | <u> </u><br>                                 |
| 535:<br>Clunie                     | j<br>                                        |
| 536:<br>Coal Creek                 | <br>                                         |
| 537:                               | j<br>                                        |
| Coal Creek538:                     | <br>                                         |
| Coal Creek                         | <br>  5w<br>                                 |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name                                 | <br> Land capability<br> (non-irrigated)<br> |
|-------------------------------------------------------------|----------------------------------------------|
| 539:<br>Cohoe                                               | <br> <br>  3e<br>                            |
| 540:<br>Cohoe                                               | <br>  3e                                     |
| 541:<br>Cohoe                                               | <br> <br>  4e                                |
| 542:<br>Cohoe                                               | <br> <br>  6e                                |
| 543:<br>Cohoe                                               | <br> <br>  6e                                |
| 544:<br>Cohoe                                               | <br> <br>  7e                                |
| 545:<br>Cohoe, dry                                          | <br> <br>  3e                                |
| 546:<br>Cohoe, dry                                          | <br> <br>  3e                                |
| 547:<br>Cohoe, dry                                          | <br> <br>  4e                                |
| 548:<br>Cohoe, dry                                          | <br> <br>  6e                                |
| 549:<br>Cohoe, dry                                          | <br> <br>  6e                                |
| 550:<br>Cohoe, dry                                          | <br> <br>  7e                                |
| 551: Cohoe, moderately steepCohoe, gently sloping           | <br> <br>  6e<br>  4e                        |
| 552: Cohoe, dry, moderately steepCohoe, dry, gently sloping | <br> <br>  6e<br>  4e                        |
| 553:<br>Cohoe, dry<br>Kenai                                 | <br>  4e<br>  3e                             |
| 554:<br>Cohoe, dry<br>Kenai                                 | <br> <br>  4e<br>  3e                        |
| 555:<br>Cohoe, dry<br>Nikolai                               | <br> <br>  6e<br>  6w                        |
| 556:<br>Cohoe, dry<br>Nikolai                               | <br> <br>  6e<br>  6w<br>                    |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name                        | Land capability<br>(non-irrigated) |
|----------------------------------------------------|------------------------------------|
| 557:<br>Cytex Creek                                | <br> <br>-  3c                     |
| 558:<br>Doroshin                                   | <br>-  7w                          |
| 559:<br>Doroshin                                   | <br> <br>-  7w                     |
| 560: Dystrocryepts Typic Cryorthents Iliamna, cool | -                                  |
| 561:<br>Foreland                                   | <br> <br>-  7w                     |
| 562: ForelandSoldotnaStarichkof                    | - i 3e                             |
| 563:<br>Pits, gravel                               | <br>-  8                           |
| 564:<br>Iliamna                                    | - <br>-  3c                        |
| 565:<br>Iliamna                                    | <br> <br>-  3e                     |
| 566:<br>Iliamna                                    | <br> <br>-  6e                     |
| 567:<br>Iliamna, cool                              | <br> <br>-  4e                     |
| 568:<br>Island                                     | <br> <br>-  3e                     |
| 569:<br>Island                                     | <br> <br>-  3e                     |
| 570:<br>Island                                     | <br> <br>-  6e                     |
| 571:<br> sland                                     | <br> <br>-  6e                     |
| 572:<br>Island, forested                           | <br> <br>-  3e                     |
| 573:<br>Kachemak                                   | <br> <br>-  3e                     |
| 574:<br>Kachemak                                   | <br> <br>-  4e                     |
| 575:<br>Kachemak                                   | j<br>I                             |

Table 14. Land Capability—Continued

|                                         | <u> </u>                                     |
|-----------------------------------------|----------------------------------------------|
| Map symbol<br>and soil name             | <br> Land capability<br> (non-irrigated)<br> |
| 576:<br>Kachemak                        | <br> <br>  6e                                |
| 577:<br>Kachemak                        | <br> <br>  7e                                |
| 578:<br>Kachemak, cool                  | <br> <br>  3e                                |
| 579:<br>Kachemak, cool                  | <br> <br>  4e                                |
| 580:<br>Kachemak, cool                  | <br> <br>  6e                                |
| 581:<br>Kachemak, cool                  | <br> <br>  6e                                |
| 582:<br>Kachemak, cool                  | <br> <br>  6e                                |
| 583:<br>Kachemak, forested              | <br> <br>  3e                                |
| 584:<br>Kachemak, forested              | <br>                                         |
| 585:<br>Kachemak, forested              | [<br>                                        |
| 586:<br>Kachemak, cool<br>Snowdance     | <br> <br>  3e                                |
| 587:<br>Kachemak, cool<br>Snowdance     | <br> <br>  3e<br>  5w                        |
| 588:<br>Kachemak, cool<br>Snowdance     | <br> <br>  4e<br>  6w                        |
| 589:<br>Kalifonsky                      | <br> <br>  5w                                |
| 590:<br>Kalifonsky                      | <br> <br>  5w                                |
| 591:<br>Kalifonsky<br>Typic Cryorthents | <br> <br>  7w<br>  6e                        |
| 592:<br>Karluk                          | <br> <br>  6w                                |
| 593:<br>Kashwitna                       | <br> <br>  3e                                |
| 594:<br>Kashwitna                       | j<br>I                                       |

Table 14. Land Capability—Continued

| Map symbol and soil name                                    | <br> Land capability<br> (non-irrigated) |
|-------------------------------------------------------------|------------------------------------------|
| 595:<br>Kashwitna                                           | <br> <br> <br>  3e                       |
| 596: Kashwitna, moderately steepKashwitna, strongly sloping | <br> <br>  6e<br>  4e                    |
| 597:<br>Kenai                                               | <br> <br>  3e                            |
| 598:<br>Kenai                                               | <br> <br>  3e                            |
| 599:<br>Kenai                                               | <br> <br>  3e                            |
| 600:<br>Kenai                                               | <br> <br>  3e                            |
| 601:<br>Kenai                                               | <br> <br>  3e                            |
| 602: Kenai, moderately steepKenai, gently sloping           | <br>  6e<br>  4e                         |
| 603:<br>Kenai<br>Starichkof                                 |                                          |
| 604:<br>Kichatna                                            | <br>                                     |
| 605:<br>Kichatna                                            | <br> <br>  6e                            |
| 606:<br>Kichatna                                            | <br> <br>  6e                            |
| 607:<br>Kichatna                                            | <br> <br>  7e                            |
| 608:<br>Kichatna                                            | <br> <br>  7e                            |
| 609:<br>Kichatna<br>Killey                                  | <br> <br>  7e<br>  5w                    |
| 610:<br>Kidazqeni                                           | <br> <br>  4e                            |
| 611: Killey Moose River                                     | <br> <br>  5w<br>  5w                    |
| 612:<br>Liten                                               | <br> <br>  4s                            |

Table 14. Land Capability—Continued

| Map symbol and soil name                                  | <br> Land capability<br> (non-irrigated) |
|-----------------------------------------------------------|------------------------------------------|
| 613: Lithic Haplocryands Alic Haplocryands Rock outcrop   | 7s                                       |
| 614: Lithic Haplocryands Alic Haplocryands Rock outcrop   | 7s                                       |
| 615:<br>Longmare                                          | <br> <br>  3c                            |
| 616:<br>Longmare                                          | <br> <br>  3c                            |
| 617:<br>Mutnala                                           | <br> <br>  3c                            |
| 618:<br>Mutnala                                           | <br> <br>  3e                            |
| 619:<br>Mutnala                                           | <br> <br>  4e                            |
| 620:<br>Mutnala                                           | <br> <br>  6e                            |
| 621:<br>Mutnala                                           | <br> <br>  7e                            |
| 622:<br>Mutnala                                           | <br> <br>  7e                            |
| 623:  Mutnala Starichkof Slikok                           | 7w                                       |
| 624:<br>Naptowne                                          | <br> <br>  3s                            |
| 625:<br>Naptowne                                          | <br> <br>  3e                            |
| 626:<br>Naptowne                                          | <br> <br>  4e                            |
| 627:<br>Naptowne                                          | <br> <br>  6e                            |
| 628:<br>Naptowne                                          | <br> <br>  6e                            |
| 629:<br>Naptowne                                          | <br> <br>  3e                            |
| 630: Naptowne, moderately steepNaptowne, strongly sloping | <br> <br>  6e<br>  4e<br>                |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name                             | Land capability<br> (non-irrigated)<br> |
|---------------------------------------------------------|-----------------------------------------|
| 631: Naptowne, strongly slopingNaptowne, gently sloping | <br> <br>  4e<br>  3e                   |
| 632:<br>Niklason                                        | <br> <br>  4w                           |
| 633:<br>Nikolaevsk                                      | <br> <br>  5w                           |
| 634:<br>Nikolaevsk                                      | <br> <br>  5w                           |
| 635:<br>Nikolaevsk                                      | <br> <br>  5w                           |
| 636:<br>Nikolai                                         | <br> <br>  6w                           |
| 637: Nikolai, somewhat poorly drained Tuxedni           | <br> <br>  6w<br>  4e                   |
| 638:<br>Puntilla                                        | <br> <br>  4e                           |
| 639:<br>Puntilla                                        | <br> <br>  6e                           |
| 640:<br>Qutal                                           | <br> <br>  3c                           |
| 641:<br>Qutal                                           | <br> <br>  3e                           |
| 642:<br>Qutal                                           | <br> <br>  3e                           |
| 643:<br>Redoubt, terraces                               | <br> <br>  3e                           |
| 644:<br>Redoubt                                         | <br> <br>  3e                           |
| 645:<br>Redoubt                                         | <br> <br>  6e                           |
| 646:<br>Redoubt, cool                                   | <br> <br>  4c                           |
| 647: Redoubt, moderately steepRedoubt, gently sloping   | <br> <br>  4e<br>  3e                   |
| 648:<br>Redoubt, cool<br>Tuxedni                        | <br> <br>  7e<br>  6e                   |
| 649:<br>Riverwash                                       | <br> <br>  8                            |

Table 14. Land Capability—Continued

|                                                          | <br> Land capability<br> (non-irrigated)<br> |
|----------------------------------------------------------|----------------------------------------------|
| 650:<br>Salamatof<br>Doroshin                            |                                              |
| 651:<br>Salamatof                                        | <br> <br>  7w                                |
| 652:<br>Slikok                                           | <br> <br>  5w                                |
| 653:<br>Slikok                                           | <br> <br>  5w                                |
| 654:<br>Smithfha                                         | <br> <br>  3e                                |
| 655:<br>Smithfha                                         | <br> <br>  7e                                |
| 656:<br>Smokey Bay                                       | <br> <br>  4w                                |
| 657:<br>Smokey Bay                                       | <br> <br>  4w                                |
| 658:<br>Snowdance                                        | <br> <br>  5w                                |
| 659:<br>Soldotna                                         | <br> <br>  3c                                |
| 660:<br>Soldotna                                         | <br> <br>  3c                                |
| 661:<br>Soldotna                                         | <br> <br>  4e                                |
| 662:<br>Soldotna                                         | <br> <br>  6e                                |
| 663:<br>Soldotna, sandy substratum                       | <br> <br>  3c                                |
| 664: Soldotna, sandy substratum                          | <br> <br>  3c                                |
| 665:<br>Soldotna, sandy substratum                       | <br> <br>  3c                                |
| 666:<br>Soldotna, sandy substratum                       | <br> <br>  3c                                |
| 667: Soldotna, strongly sloping Soldotna, gently sloping | <br> <br>  4e<br>  3e                        |
| 668: Soldotna, sandy substratum Kenai                    |                                              |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name                 | Land capability<br> (non-irrigated)<br> |
|---------------------------------------------|-----------------------------------------|
| 669:<br>Soldotna, sandy substratum<br>Kenai | <br> <br> <br>  3e<br>  3e              |
| 670:<br>Soldotna<br>Kichatna                |                                         |
| 671:<br>Soldotna<br>Kichatna                | <br> <br>  7e<br>  7e                   |
| 672:<br>Soldotna<br>Nikolai                 | <br> <br>  3c<br>  6w                   |
| 373:<br>Spenard                             | <br> <br>  5w                           |
| 674:<br>Spenard                             | <br> <br>  5w                           |
| 675:<br>Spenard                             | <br> <br>  6w                           |
| 676:<br>Starichkof<br>Doroshin              | <br> <br>  7w<br>  7w                   |
| 677:<br>Starichkof                          | <br> <br>  7w                           |
| 678:<br>Starichkof                          | <br> <br>  7w                           |
| 679:<br>Starichkof, forested                | <br> <br>  7w                           |
| 680:<br>Starichkof<br>Slikok<br>Naptowne    | <br> <br>  7w<br>  5w<br>  3e           |
| 681:<br>Starichkof<br>Spenard               | <br> <br>  7w<br>  5w                   |
| 582:<br>Susitna<br>Riverwash                | <br> <br>  3c<br>  8                    |
| 583:<br>Susitna                             | <br> <br>  3c                           |
| 884:<br>Talkeetna                           | <br> <br>  4e                           |
| 685:<br>Talkeetna                           | <br> <br>  6e                           |

Table 14. Land Capability—Continued

| Map symbol                                | <br> Land capability       |
|-------------------------------------------|----------------------------|
| and soil name                             | (non-irrigated)<br>        |
| 686:<br>Talkeetna<br>Starichkof           | <br> <br> <br>  6e<br>  7w |
| 687:<br>Tangerra                          | <br> <br>  5w              |
| 688:<br>Beaches, tidal flats              | <br> <br>  8               |
| 689:<br>Tlikakila                         | <br> <br>  5w              |
| 690:<br>Tlikakila                         | <br> <br>  5w              |
| 691:<br>Tlikakila                         | <br> <br>  6w              |
| 692:<br>Tokositna                         | <br> <br>  3e              |
| 693:<br>Tokositna                         | <br> <br>  3e              |
| 694:<br>Tokositna                         | <br> <br>  4e              |
| 695:<br>Truuli                            | <br> <br>  5w              |
| 696:<br>Tutka<br>Kasitsna<br>Rock outcrop | i 6e                       |
| 697:<br>Tutka<br>Portgraham               | <br> <br>  7e<br>  7e      |
| 698:<br>Tuxedni                           | <br> <br>  4e              |
| 699:<br>Tuxedni                           | <br> <br>  4e              |
| 700:<br>Tuxedni, warm                     | <br> <br>  4e              |
| 701:<br>Typic Cryaquents                  | <br> <br>  5w              |
| 702: Typic Cryopsamments                  | <br> <br>  6e              |
| 703: Typic Cryorthents                    | <br> <br>  7e              |
| 704:<br>Urban land                        | <br> <br>  8               |

Table 14. Land Capability—Continued

| Map symbol<br>and soil name | Land capability<br> (non-irrigated)<br> |
|-----------------------------|-----------------------------------------|
| 705:<br>Water, fresh        | <br> <br>   8                           |
| 706:                        |                                         |
| Whitsol                     | 3c                                      |
| 707:<br>Whitsol             | 3c                                      |
| 708:<br>Whitsol             | 4e                                      |
| 709:<br>Whitsol             | 6e                                      |
| 710:<br>Whitsol             | <br>   7e                               |
| 711:                        |                                         |
| Whitsol Doroshin            |                                         |

## Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name         | Pct.   Camp and Picnic Areas   of   (Alaska criteria)   map |                                                                                                                                                      |                                                 | Primitive camp areas<br>(Alaska criteria)                                                                                        |                                   | Foot and ATV trails (Alaska criteria)                                                                                       |                                  |
|----------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                                  | unit                                                        | Rating class and limiting features                                                                                                                   | Value<br> <br> <br>                             | Rating class and limiting features                                                                                               | Value<br> <br>                    | Rating class and limiting features                                                                                          | Value<br> <br>                   |
| 501:<br>Aquic Cryofluvents       | <br>  85<br> <br> <br> <br> <br>                            | Very limited: Flooding Silty surface layer dusty when dry and slippery when wet Depth to saturated zone                                              | <br> <br> 1.00<br> 0.50<br> <br> <br> 0.05      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated<br>  zone | <br> <br> 0.50<br> <br> <br> 0.05 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br> <br> <br>     |
| 502: Aquic Cryofluvents, shallow |                                                             | <br> Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone                | <br> <br> 1.00<br> 0.50<br> <br> <br> <br> 0.05 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone      | <br> <br> 0.50<br> <br> <br> 0.05 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br> <br> <br>     |
| 503:<br>Badland, sea cliffs      | 100                                                         | <br> <br> Not rated<br>                                                                                                                              |                                                 | <br> <br> Not rated<br>                                                                                                          |                                   | <br> <br> Not rated<br>                                                                                                     | <br> <br>                        |
| 504:<br>Badland, sea cliffs      | 55                                                          | <br> <br> Not rated                                                                                                                                  |                                                 | <br> <br> Not rated                                                                                                              | <br> <br> <br>                    | <br> Not rated                                                                                                              | <br>                             |
| Typic Cryorthents                | <br> 45<br> <br> <br>                                       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                | <br> 1.00<br> 0.50<br>                          | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> 1.00<br> 0.50<br>            | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet             | <br> 1.00<br> 0.50<br>           |
| 505:<br>Beaches                  | 90                                                          | <br> <br> Not rated<br>                                                                                                                              | <br> <br>                                       | <br> <br> Not rated                                                                                                              | <br> <br> <br>                    | <br> <br> Not rated                                                                                                         | <br> <br>                        |
| 506:<br>Beluga                   | <br>  85<br> <br> <br>                                      | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> 0.50                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br> <br>  | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br> <br> |
| 507:<br>Beluga                   | <br>  87<br> <br> <br> <br> <br>                            | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br> <br>  | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.86<br> 0.50<br> <br> |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.                       | (Alaska criteria)                                                                                                                                    | 6                                         | Primitive camp areas (Alaska criteria)                                                                                             |                                            | Foot and ATV trails (Alaska criteria)                                                                                       |                                  |  |
|--------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------|--|
|                          | map<br> unit<br> <br>      | •                                                                                                                                                    | Value                                     | Rating class and limiting features                                                                                                 | Value<br> <br>                             | Rating class and limiting features                                                                                          | Value                            |  |
| 508:<br>Beluga           | 87                         | Very limited:   Depth to saturated zone   Restricted   permeability   Silty surface layer   dusty when dry and   slippery when wet   Slope           | <br>  1.00<br> 1.00<br>  0.50<br>    0.16 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 1.00<br> 0.50<br> <br> <br> 0.16 | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.86<br> 0.50<br> <br> |  |
| 509:<br>Beluga           | 55                         | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> 0.50               | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.86<br> 0.50<br>           |  |
| Mutnala                  | 40<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                       | <br> 0.50<br> <br>                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> 0.50<br> <br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br> <br>          |  |
| 510:<br>Beluga           | 60                         | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> 0.50               | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.86<br> 0.50<br>           |  |
| Smokey Bay               | 37                         | Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 1.00<br> 0.50               | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> -<br> 1.00<br> 0.50<br> -<br> -       |                                                                                                                             | <br> 0.86<br> 0.50<br> <br>      |  |
| 511:<br>Beluga           | 50                         | Very limited:   Depth to saturated zone   Restricted permeability   Silty surface layer   dusty when dry and   slippery when wet   Slope             | <br> 1.00<br> 1.00<br> 0.50<br> <br> 0.16 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.16 | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.86<br> 0.50<br> <br>      |  |
| Smokey Bay               | 47<br> <br> <br> <br> <br> | Very limited:   Depth to saturated zone   Restricted permeability   Slope   Silty surface layer   dusty when dry and   slippery when wet             | <br> 1.00<br> 1.00<br> 0.63<br> 0.50      | Very limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet                               | <br> 1.00<br> 0.63<br> 0.50<br>            | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br> slippery when wet  | <br> 0.86<br> 0.50<br> <br> <br> |  |
| 512:<br>Benka            | <br>   86<br> <br>         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                       | <br> <br> 0.50<br>                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> 0.50<br>                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br>               |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name     | Pct.                          | of (Alaska criteria)                                                                                      |                              | Primitive camp areas (Alaska criteria)                                                                    | Primitive camp areas<br>(Alaska criteria) |                                                                                                | Foot and ATV trails<br>(Alaska criteria) |  |  |
|------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------|--|--|
|                              | map<br> unit<br> <br>         |                                                                                                           | Value                        | Rating class and limiting features                                                                        | Value<br> <br>                            | Rating class and limiting features                                                             | Value                                    |  |  |
| 513:<br>Benka                | <br> <br> -  90<br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> <br> 0.50<br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> <br> 0.50<br> <br>              | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> <br> 0.50<br> <br>             |  |  |
| 514:<br>Benka                | <br>-  85<br> <br> <br>       | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope      | <br> 0.50<br> <br> <br> 0.37 | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope      | <br> 0.50<br> <br> <br> 0.37              | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br>                       |  |  |
| 515:<br>Benka                | <br> -  90<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br>                            |  |  |
| 516:<br>Benka                | <br> -  95<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br>                       |  |  |
| 517: Benka, strongly sloping |                               | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.63<br> 0.50<br>  | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br>                  |  |  |
| Benka, gently sloping        | <br>-  40<br> <br> <br>       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br> <br>                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br>                       |  |  |
| 518:<br>Boxcar               | <br> -  75<br> <br> <br>      | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                | <br> 0.50<br>                | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                 | <br> 0.50<br>                             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br>                       |  |  |
| 519:<br>Boxcar               | <br> -<br>  80<br> <br> <br>  | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | 0.50                                     |  |  |
| 520:<br>Boxcar               | <br> -  85<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>  | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br>                  |  |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name                 | Pct.<br>of<br>map           | (Alaska criteria)                                                                                         |                         | Primitive camp areas<br>(Alaska criteria)                                                                 | 3                       | Foot and ATV trails (Alaska criteria)                                                                                |                             |  |
|------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------|--|
|                                          | IIIap<br> unit<br> <br>     |                                                                                                           | Value                   |                                                                                                           | Value<br> <br>          | Rating class and limiting features                                                                                   | Value                       |  |
| 521:<br>Boxcar, cool                     | <br> <br>  80<br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | 0.50                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> <br> 0.50     | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> <br> <br> 0.50         |  |
| 522:<br>Boxcar, cool                     | <br>  80<br> <br> <br> <br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> 1.00<br> 0.50      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>     |  |
| 523:<br>Chenega                          | <br>  85<br> <br> <br> <br> | Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> 1.00<br> 0.50 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Flooding         | <br> 0.50<br> <br> 0.40     |  |
| 524:<br>Chenega, cool                    | <br>  90<br> <br> <br> <br> | <br> Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet  | <br> 1.00<br> 0.50      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | 0.50                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Flooding         | 0.50                        |  |
| 525:<br>Chenega, occasionally<br>flooded | <br>  85<br> <br> <br> <br> | Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> 1.00<br> 0.50 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>     |  |
| 526:<br>Chulitna                         | <br> <br>  90<br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>     |  |
| 527:<br>Chulitna                         | <br>  80<br> <br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> 0.50<br>               |  |
| 528:<br>Chulitna                         | <br>  85<br> <br> <br> <br> | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>  | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>  | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>      |  |
| 529:<br>Chulitna                         | <br>  85<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.                                       | (Alaska criteria)                                                                                                                                    | •                                                         | <br>  Primitive camp areas<br>  (Alaska criteria)                                                                                    |                                                 | Foot and ATV trails<br>(Alaska criteria)                                                                                                                      |                                                              |  |
|--------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--|
|                          | map<br> unit<br> <br>                      | Rating class and limiting features                                                                                                                   | Value<br> Value<br>                                       | Rating class and limiting features                                                                                                   | Value<br> <br>                                  | Rating class and limiting features                                                                                                                            | Value<br> <br> <br>                                          |  |
| 530:<br>Chunilna         | <br> <br>  92<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>                               | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                       | <br> <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 1.00<br> 0.50<br>                                  |  |
| 531:<br>Chunilna         | <br>  82<br> <br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br> <br>                          | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                       | <br> <br> 1.00<br> 0.50<br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 1.00<br> 0.50<br> <br>                             |  |
| 532:<br>Chunilna, cool   | <br>  80<br> <br> <br> <br>                |                                                                                                                                                      | <br> 1.00<br> 0.50<br>                                    | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                       | <br> <br> 1.00<br> 0.50<br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> 1.00<br> 0.50<br>                                       |  |
| 533:<br>Chunilna, cool   | <br>  85<br> <br> <br> <br> <br> <br>      |                                                                                                                                                      | <br> 0.99<br> 0.50<br> <br> <br> <br> 0.16                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope   | <br> <br> 0.99<br> 0.50<br> <br> <br> <br> 0.16 | Very limited:<br>  Water erosion hazard<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet             | <br> 1.00<br> 0.50<br> <br> 0.50<br>                         |  |
| 534:<br>Clam Gulch       | <br>  85<br> <br> <br> <br> <br> <br>      | Very limited:<br>  Depth to saturated zone<br>  Restricted<br>  permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.96<br> <br> 0.50                          | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet              | <br> <br> 1.00<br> 0.50<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> 1.00<br> 0.50<br> <br> <br>                             |  |
| 535:<br>Clunie           | <br>  90<br> <br> <br> <br> <br> <br> <br> |                                                                                                                                                      | <br>  1.00<br> 1.00<br> 1.00<br> 1.00<br>  1.00<br>  1.00 | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> 0.50<br> <br> <br>  | Very limited:   Depth to saturated zone   Excess surface   organic matter   Ponding   Silty surface layer   dusty when dry and   slippery when wet   Flooding | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50<br> <br> <br> 0.40 |  |
| 536:<br>Coal Creek       | <br>  75<br> <br> <br> <br> <br> <br> <br> |                                                                                                                                                      | <br> <br> 1.00<br> 1.00<br> 0.60<br> 0.50<br>             | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet              | <br> <br> 1.00<br> 0.50<br> <br> <br>           | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> 0.86<br> 0.50<br> <br> <br>                        |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.                                            | (Alaska criteria)                                                                                                                                         | <b>;</b>                                            | Primitive camp areas (Alaska criteria)                                                                                             |                                            | Foot and ATV trails<br>  (Alaska criteria)                                                                                  | 8                                         |
|--------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | map<br> unit<br> <br>                           | !                                                                                                                                                         | Value<br> <br> <br>                                 | Rating class and limiting features                                                                                                 | Value<br> <br>                             | Rating class and limiting features                                                                                          | Value                                     |
| 537:<br>Coal Creek       | <br>  88<br>  88<br>   <br>   <br>              | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted<br>  permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.60<br> <br> 0.50               | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> <br> 1.00<br> 0.50<br> <br> <br> | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.86<br> 0.50<br> <br>          |
| 538:<br>Coal Creek       | <br>  88<br> <br> <br> <br> <br> <br> <br> <br> |                                                                                                                                                           | <br> 1.00<br> 0.60<br> <br> 0.50<br> <br> <br> 0.37 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.37 |                                                                                                                             | <br> <br> 1.00<br> 0.86<br> <br> 0.50<br> |
| 539:<br>Cohoe            | <br>  87<br> <br>                               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                            | <br> <br> 0.50<br>                                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> 0.50<br> <br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br>                        |
| 540:<br>Cohoe            | <br>  85<br> <br> <br>                          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                            | <br> <br> 0.50<br>                                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> 0.50<br>                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br>                        |
| 541:<br>Cohoe            | <br>  89<br> <br> <br>                          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                                 | <br> 0.50<br> <br> <br> <br> 0.37                   | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                          | <br> <br> 0.50<br> <br> <br> 0.37          | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 1.00<br> 0.50<br>               |
| 542:<br>Cohoe            | <br>  93<br> <br> <br> <br>                     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                     | <br> <br> 1.00<br> 0.50<br>                         | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | 1.00<br> 0.50<br>                         |
| 543:<br>Cohoe            | <br>  80<br> <br> <br>                          | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                     | <br> <br> 1.00<br> 0.50<br>                         | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 1.00<br> 0.50<br>               |
| 544:<br>Cohoe            | <br>  84<br> <br> <br>                          | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                                      | <br> 1.00<br> 0.50<br>                              | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                       | <br> 1.00<br> 0.50<br>                     | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                 | <br> 1.00<br> 0.50<br>                    |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name           | Pct.                    | (Alaska criteria)                                                                                     | s                            | Primitive camp areas (Alaska criteria)                                                                | :                            | Foot and ATV trai<br>(Alaska criteria)                                                                               |                             |
|------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------|
|                                    | map<br> unit<br> <br> - | Rating class and limiting features                                                                    | Value                        | Rating class and limiting features                                                                    | Value                        | Rating class and limiting features                                                                                   | Value                       |
| 545:<br>Cohoe, dry                 | <br> <br>  87<br> <br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> <br> 0.50          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> <br> 0.50          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> <br> 0.50         |
| 546:<br>Cohoe, dry                 | <br>  85<br> <br> <br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 0.50<br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>          |
| 547:<br>Cohoe, dry                 | <br>  89<br> <br> <br>  | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope  | <br> 0.50<br> <br> <br> 0.37 | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope  | <br> 0.50<br> <br> <br> 0.37 | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>      |
| 548:<br>Cohoe, dry                 | <br>   93<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>       | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>       | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>      |
| 549:<br>Cohoe, dry                 | <br>   80<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>       | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>      |
| 550:<br>Cohoe, dry                 | <br>   84<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>       | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>      |
| 551:<br>Cohoe, moderately<br>steep |                         | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>  | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> |
| Cohoe, gently sloping              | <br>   40<br> <br>      | Somewhat limited:   Silty surface layer   dusty when dry and   slippery when wet                      | <br> 0.50<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 0.50<br> <br>      |                                                                                                                      | <br> 0.50<br>               |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name          | Pct.                                       | (Alaska criteria)                                                                                                                                                                       | 3                                         | Primitive camp areas (Alaska criteria)                                                                    |                                                  | Foot and ATV trails (Alaska criteria)                                                                                                                      | 3                                         |
|-----------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                   | map<br> unit<br> <br>                      |                                                                                                                                                                                         | Value<br> <br>                            | Rating class and limiting features                                                                        | Value<br> <br>                                   | Rating class and limiting features                                                                                                                         | Value                                     |
| 552: Cohoe, dry, moderately steep | <br> 45<br> <br> <br>                      | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                                                                    | <br> <br> 1.00<br> 0.50<br>               | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> <br> <br> 1.00<br> 0.50<br>                 | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                                                | <br> <br> 1.00<br> 0.50<br>               |
| Cohoe, dry, gently sloping        |                                            | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                                                                              | <br> 0.50<br>                             | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                | <br> <br> 0.50<br> <br>                          | Somewhat limited:   Silty surface layer   dusty when dry and   slippery when wet                                                                           | <br> <br> 0.50<br> <br>                   |
| 553:<br>Cohoe, dry                | <br>  55<br> <br> <br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                                                               | 0.50                                      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.37                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 1.00<br> 0.50<br>               |
| Kenai                             | <br>  30<br> <br> <br> <br> <br>           | Somewhat limited:<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                                       | <br> 0.96<br> 0.50<br> <br> <br>          | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope      | <br> -<br> 0.50<br> -<br> -<br> 0.37             | Very limited:   Water erosion hazard   Silty surface layer   dusty when dry and   slippery when wet                                                        | <br> 1.00<br> 0.50<br> <br>               |
| 554:<br>Cohoe, dry                | <br>  55<br> <br> <br>                     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                   | <br> <br> 1.00<br> 0.50                   | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>                      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 1.00<br> 0.50<br>               |
| Kenai                             | 30                                         | Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet                                                                                    | <br> 1.00<br> 0.96<br> 0.50               | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> -<br> 1.00<br> 0.50<br> -<br> -             | Very limited:   Water erosion hazard   Silty surface layer   dusty when dry and   slippery when wet                                                        | <br> 1.00<br> 0.50<br>                    |
| 555:<br>Cohoe, dry                | <br>  70<br> <br> <br>                     | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                                                                    | <br> <br> 1.00<br> 0.50<br>               | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>                      | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                                                | <br> <br> 1.00<br> 0.50<br>               |
| Nikolai                           | <br>  30<br> <br> <br> <br> <br> <br> <br> | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.60<br> 0.50 | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet    | <br> -<br> 1.00<br> 0.50<br> -<br> -<br> -<br> - | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50<br> <br> |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.                    | (Alaska criteria)                                                                                                                                                                            | 8                                         | Primitive camp areas (Alaska criteria)                                                                                           |                                            | Foot and ATV trails (Alaska criteria)                                                                                                                      | <b>S</b>                                  |
|--------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | map<br> unit<br> <br>   | <br>  Rating class and<br>  limiting features<br>                                                                                                                                            | Value                                     |                                                                                                                                  | Value<br> <br>                             | Rating class and   limiting features                                                                                                                       | Value                                     |
| 556:<br>Cohoe, dry       | 70                      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                               | <br> <br> <br> 0.50                       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> <br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> <br> 0.50                       |
| Nikolai                  | 30                      | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.60<br> 0.50 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br> <br> | <br> 1.00<br> 0.50<br> <br> <br> <br> <br> | organic matter                                                                                                                                             | <br> 1.00<br> 1.00<br> <br> 0.50<br> <br> |
| 557:<br>Cytex Creek      | 75<br> <br> <br>        | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                      | <br> 1.00<br> 0.50<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br> <br>           |                                                                                                                                                            | <br> <br> 0.78<br> 0.50<br> <br>          |
| 558:<br>Doroshin         | 83                      | Very limited:   Depth to saturated zone   Excess surface   organic matter   Silty surface layer   dusty when dry and   slippery when wet                                                     | <br> 1.00<br> 1.00<br> <br> 0.50          | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> 1.00<br> 0.50<br> <br> <br>           | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50          |
| 559:<br>Doroshin         | 79                      | Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet                                                                 | <br> 1.00<br> 1.00<br> <br> <br> 0.50     | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br> <br> <br>      | organic matter                                                                                                                                             | <br> <br> 1.00<br> 1.00<br> <br> 0.50     |
| 560:<br>Dystrocryepts    | 50                      | <br> Very limited:<br>  Slope<br>  Silty surface layer dusty<br>  when dry and<br>  slippery when wet<br>  Sandy surface layer<br>  easily displaced                                         | <br> 1.00<br> 0.50<br> <br> <br> 0.50     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> <br> 1.00<br> 0.50<br> <br> <br>      | easily displaced                                                                                                                                           | <br> <br> 0.50<br> <br> 0.50<br>          |
| Typic Cryorthents        | <br>   30<br> <br> <br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                                                                         | <br> 1.00<br> 0.50<br>                    | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                             | <br> 1.00<br> 0.50<br>                     |                                                                                                                                                            | <br> 1.00<br> 0.50<br>                    |
| Iliamna, cool            | 20<br> <br> <br>        | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                             | <br> 1.00<br> 0.50<br>                    | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                             | <br> <br> 1.00<br> 0.50<br>                |                                                                                                                                                            | <br> 1.00<br> 0.50<br>                    |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | <br> Pct.<br>  of                     | (Alaska criteria)                                                                                         | i                                     | Primitive camp areas (Alaska criteria)                                                                    |                                        | Foot and ATV trails (Alaska criteria)                                                                                | 3                                          |
|--------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|                          | map<br> unit<br> <br>                 | Rating class and limiting features                                                                        | Value                                 | Rating class and limiting features                                                                        | Value<br> <br>                         | Rating class and limiting features                                                                                   | Value<br> <br> <br>                        |
| 561:<br>Foreland         | <br> <br>  79<br> <br> <br> <br> <br> |                                                                                                           | <br> <br> 1.00<br> 1.00<br> <br> 0.50 | <br> <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>                                        | <br> <br> <br> 1.00<br> <br> <br> <br> | Very limited:   Depth to saturated zone   Excess surface   organic matter   Sandy surface layer   easily displaced   | <br> <br> 1.00<br> 1.00<br> <br> <br> 0.50 |
| 562:<br>Foreland         | <br>  59<br> <br> <br> <br> <br>      | Excess surface organic matter                                                                             | <br> 1.00<br> 1.00<br> <br> 0.50      | Very limited: Depth to saturated zone                                                                     | <br> <br> 1.00<br> <br> <br>           | organic matter                                                                                                       | <br> 1.00<br> 1.00<br> <br> <br> 0.50      |
| Soldotna                 | <br>  20<br> <br>                     | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                | <br> <br> 0.50<br>                    | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                | <br> <br> 0.50<br> <br>                | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> <br> 0.50<br>                         |
| Starichkof               | <br>  20<br> <br> <br> <br> <br>      |                                                                                                           | <br> 1.00<br> 1.00<br> 1.00           | Very limited:   Depth to saturated zone   Ponding                                                         | <br> -<br> 1.00<br> 1.00<br> -<br> -   | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                 | <br> 1.00<br> 1.00<br> <br> -<br> 1.00     |
| 563:<br>Pits, gravel     | <br>  95<br>                          | <br> <br> Not rated<br>                                                                                   | <br> <br> <br>                        | <br> <br> Not rated<br>                                                                                   | <br> <br> <br>                         | <br> <br> Not rated<br>                                                                                              | <br> <br> <br>                             |
| 564:<br>Iliamna          | <br>  80<br> <br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>                    |
| 565:<br>Iliamna          | <br>  82<br> <br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.16     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.16      |                                                                                                                      | <br> <br> 1.00<br> 0.50<br>                |
| 566:<br>Iliamna          | <br>  80<br> <br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>                |
| 567:<br>Iliamna, cool    | <br>  90<br> <br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> <br> 0.50<br> <br>               |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.                               | (Alaska criteria)                                                                                         | ıs                           | Primitive camp areas (Alaska criteria)                                                                    | S                            | Foot and ATV trails (Alaska criteria)                                                                                |                         |  |
|--------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------|--|
|                          | map<br> unit<br> <br>_             | Rating class and limiting features                                                                        | Value                        | Rating class and limiting features                                                                        | Value<br> <br>               | <br>  Rating class and<br>  limiting features                                                                        | Value                   |  |
| 568:<br>Island           | <br> <br> -  90<br> <br> <br>      | <br> <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> <br> 0.50<br> <br> | <br> <br>  Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> <br> <br> 0.50<br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>      |  |
| 569:<br>Island           | <br> -   91<br> <br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | 0.50                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | 0.50                    |  |
| 570:<br>Island           | <br> -  90<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>       | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>  |  |
| 571:<br>Island           | <br> -  92<br> <br> <br> <br> <br> | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> 1.00<br> 0.50<br>       | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>  |  |
| 572:<br>Island, forested | <br> -   90<br> <br> <br>          | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                 | <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> 0.50<br>           |  |
| 573:<br>Kachemak         | <br> - 80<br> <br>                 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>      |  |
| 574:<br>Kachemak         | <br> - 80<br> <br> <br>            | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 0.50<br> <br> <br> 0.37 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 0.50<br> <br> <br> 0.37 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br> |  |
| 575:<br>Kachemak         | <br> -<br>  80<br> <br> <br>       | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> <br> 1.00<br> 0.50<br>  | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> <br> 1.00<br> 0.50<br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br> |  |
| 576:<br>Kachemak         | <br> - 80<br> <br>                 | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> <br> 1.00<br> 0.50<br>  | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50<br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br> |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name   | Pct.                        | (Alaska criteria)                                                                                         | S                           | Primitive camp areas (Alaska criteria)                                                                    | S                            | Foot and ATV trails (Alaska criteria)                                                          |                         |  |
|----------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------|-------------------------|--|
|                            | map<br> unit<br> <br>       | :                                                                                                         | Value                       | Rating class and limiting features                                                                        | Value<br> <br>               |                                                                                                | Value                   |  |
| 577:<br>Kachemak           | <br> <br>  90<br> <br> <br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50     | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50<br>  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br> |  |
| 578:<br>Kachemak, cool     | <br>  80<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br>      |  |
| 579:<br>Kachemak, cool     | <br>  80<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | 0.50                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br>      |  |
| 580:<br>Kachemak, cool     | <br> <br>  80<br> <br> <br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50<br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br> |  |
| 581:<br>Kachemak, cool     | <br>  40<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br>      |  |
| 582:<br>Kachemak, cool     | <br>  40<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>      | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> 1.00<br> 0.50<br>       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.50<br> <br> <br> |  |
| 583:<br>Kachemak, forested | <br>  75<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br>      |  |
| 584:<br>Kachemak, forested | <br>  85<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 0.50<br> <br> <br> 0.37 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br> |  |
| 585:<br>Kachemak, forested | <br>  80<br> <br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50          | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br> <br> |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | <br> Pct.<br>  of<br> map        | (Alaska criteria)                                                                                                                  | 3                                     | Primitive camp areas (Alaska criteria)                                                                                             |                                            | Foot and ATV trails (Alaska criteria)                                                                                                                  | 3                                |
|--------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                          | map<br> unit<br> <br>            |                                                                                                                                    | Value                                 | Rating class and limiting features                                                                                                 | Value<br> <br>                             | Rating class and limiting features                                                                                                                     | Value                            |
| 586:<br>Kachemak, cool   | <br> <br>  60<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> 0.50                        | <br>  Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                    | <br> <br> <br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                         | <br> <br> <br> 0.50<br>          |
| Snowdance                | <br>  40<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> -<br> 1.00<br> 0.50<br> -<br>         | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> 0.86<br> 0.50<br>           |
| 587:<br>Kachemak, cool   | <br>  65<br> <br> <br>           | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                          | 0.50                                  | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                          | <br> <br> 0.50<br>                         | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                              | <br> <br> 0.50<br>               |
| Snowdance                | <br>  35<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br>                | Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> 0.86<br> 0.50<br>           |
| 588:<br>Kachemak, cool   | <br> <br>  70<br> <br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                          | 0.50                                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                          | <br> <br> 0.50<br> <br> <br> 0.37          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                         | <br> <br> 0.50<br> <br>          |
| Snowdance                | <br>  30<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> 0.37 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.37 | <br> Very limited:<br>  Water erosion hazard<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.86<br> <br> 0.50 |
| 589:<br>Kalifonsky       | <br> <br>  83<br> <br> <br> <br> | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> 1.00<br> 0.50<br>           | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> <br> 1.00<br> 0.50<br>           | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                                         | <br> <br> 1.00<br> 0.50<br>      |
| 590:<br>Kalifonsky       | <br> <br>  85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                | <br> <br> 1.00<br> 0.50<br>      |
| 591:<br>Kalifonsky       | <br>  50<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                | <br> <br> 1.00<br> 0.50<br>      |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name               | Pct.<br>of                  | (Alaska criteria)                                                                                                                               | 3                                | Primitive camp areas (Alaska criteria)                                                                                  |                                  | Foot and ATV trails (Alaska criteria)                                                                                | 3                                |
|----------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                                        | map<br> unit<br> <br>       | :                                                                                                                                               | Value                            | Rating class and limiting features                                                                                      | Value<br> <br>                   | Rating class and limiting features                                                                                   | Value                            |
| 591:<br>Typic Cryorthents              | 30                          | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                            | <br> <br> 1.00<br> 0.50<br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                            | <br> <br> <br> 1.00<br> 0.50<br> | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                          | <br> <br> 1.00<br> 0.50<br>      |
| 592:<br>Karluk                         | <br>  80<br> <br> <br>      | Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br> |                                                                                                                      | <br> <br> 0.94<br> 0.50<br> <br> |
| 593:<br>Kashwitna                      | <br> <br>  85<br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                  | <br> <br> 0.50<br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> <br> 0.50<br> <br>     |
| 594:<br>Kashwitna                      | <br>  88<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                  | 0.50                             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>               |
| 595:<br>Kashwitna                      | <br> <br>  85<br> <br> <br> | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 0.63<br> 0.50<br>      | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet               | <br> <br> 0.63<br> 0.50<br>      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>      |
| 596:<br>Kashwitna, moderately<br>steep | <br> 50<br> <br> <br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                           | <br> <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                   | <br> <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>      |
| Kashwitna, strongly sloping            | 40<br> <br> <br> <br> <br>  | Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                            | <br> 0.96<br> 0.50<br>           | Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                    | <br> 0.96<br> 0.50<br>           | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> 1.00<br> 0.50<br>           |
| 597:<br>Kenai                          | <br>  81<br> <br> <br>      | <br> Somewhat limited:<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                     | <br> <br> 0.96<br> 0.50<br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>          |
| 598:<br>Kenai                          | <br> <br>  82<br> <br> <br> | <br> Somewhat limited:<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                     | <br> <br> 0.96<br> 0.50          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> <br> 0.50<br> <br>     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>          |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name           | Pct.                                  | (Alaska criteria)                                                                                                                      | 5                                          | Primitive camp areas (Alaska criteria)                                                                    |                                            | Foot and ATV trails (Alaska criteria)                                                                                | 5                                     |
|------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|                                    | map<br> unit<br> <br>                 |                                                                                                                                        | Value                                      | Rating class and limiting features                                                                        | Value<br> <br>                             | Rating class and limiting features                                                                                   | Value                                 |
| 599:<br>Kenai                      | <br> <br>  85<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 0.96<br> 0.50<br> <br> <br> 0.37 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> <br> 0.50<br> <br> <br> 0.37     | <br> Very limited:<br>  Water erosion hazard<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet  | <br> <br> 1.00<br> 0.50<br>           |
| 600:<br>Kenai                      | <br> <br>  88<br> <br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.96<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> <br> 1.00<br> 0.50<br> <br> <br> | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br>      |
| 601:<br>Kenai                      | <br>  86<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.96<br> 0.50<br>            | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br> <br> |
| 602:<br>Kenai, moderately<br>steep |                                       | <br> Very limited:<br>  Slope<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.96<br> 0.50                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br> <br>           | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br> <br>           |
| Kenai, gently sloping              | <br>  40<br> <br> <br>                | <br> Somewhat limited:<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.96<br> 0.50<br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br> <br>          |
| 603:<br>Kenai                      | <br>  60<br> <br> <br>                | Somewhat limited:<br>  Restricted permeability<br>  Slope<br>  Silty surface layer dusty<br>  when dry and slippery<br>  when wet      | <br> 0.96<br> 0.63<br> 0.50                | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>                     | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>                |
| Starichkof                         | <br>  31<br> <br> <br>                | Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface organic<br>  matter                                        | <br> 1.00<br> 1.00<br> 1.00                | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br> <br>                                     | <br> <br> 1.00<br> 1.00<br>                | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                      | <br> 1.00<br> 1.00<br> <br> 1.00      |
| 604:<br>Kichatna                   | <br>  70<br> <br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> <br> 0.50<br> <br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> <br> 0.50<br> <br>          |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.<br>of<br>map       | (Alaska criteria)                                                                                                 | 3                           | Primitive camp areas<br>(Alaska criteria)                                                      |                                   | Foot and ATV trails<br>  (Alaska criteria)                                                                           | 8                                               |
|--------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|                          | unit                    | Rating class and limiting features                                                                                | Value<br> <br>              | Rating class and limiting features                                                             | Value<br> <br>                    | Rating class and limiting features                                                                                   | Valu                                            |
| 605:<br>Kichatna         | 75<br> <br>             | <br> <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet    | <br> <br> 0.63<br> 0.50<br> | Somewhat limited:<br>Slope<br>Silty surface layer<br>dusty when dry and<br>slippery when wet   | <br> <br> <br> 0.63<br> 0.50<br>  | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>                     |
| 606:<br>Kichatna         | 75<br> <br> <br>        | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet             | <br> 1.00<br> 0.50<br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                   | <br> <br> 1.00<br> 0.50<br>       | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet      | <br> <br> 1.00<br> 0.50<br>                     |
| 607:<br>Kichatna         | 85<br> <br>             | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet             | <br> 1.00<br> 0.50<br>      | Very limited:<br>Slope<br>Silty surface layer<br>dusty when dry and<br>slippery when wet       | <br> -<br> 1.00<br> 0.50<br> -    | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>                     |
| 608:<br>Kichatna         | 70                      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet             | <br> 1.00<br> 0.50<br>      | Very limited:<br>Slope<br>Silty surface layer<br>dusty when dry and<br>slippery when wet       | <br> -<br> 1.00<br> 0.50<br> -    | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br>                |
| 609:<br>Kichatna         | 50                      | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> 1.00<br> 0.50          | Very limited:<br>Slope<br>Silty surface layer<br>dusty when dry and<br>slippery when wet       | <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>                     |
| Killey                   | 50                      | Very limited:   Flooding   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet | <br> 1.00<br> 0.99<br> 0.50 | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet | <br> <br> 0.99<br> 0.50<br> <br>  | Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Flooding          | <br> 0.50<br> 0.50<br> <br> <br> <br> <br> 0.40 |
| 610:<br>Kidazqeni        | <br>   85<br> <br> <br> | <br> Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br> | Somewhat limited:<br>Silty surface layer<br>dusty when dry and<br>slippery when wet            | <br> <br> <br> 0.50<br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br> <br>                         |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name    | Pct.<br>of                            | (Alaska criteria)                                                                                                                     | 3                           | Primitive camp areas (Alaska criteria)                                                                                      |                                       | Foot and ATV trails<br>(Alaska criteria)                                                                                              |                                                 |  |
|-----------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--|
|                             | map<br> unit<br> <br>                 | Rating class and limiting features                                                                                                    | Value                       | Rating class and limiting features                                                                                          | Value<br> <br>                        | Rating class and limiting features                                                                                                    | Value                                           |  |
| 611:<br>Killey              | <br>  45<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.99<br> 0.50 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> <br> 0.99<br> 0.50<br> <br> |                                                                                                                                       | <br> <br> 0.50<br> 0.50<br> <br> <br> <br> 0.40 |  |
| Moose River                 | <br>  45<br> <br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> -<br> 1.00<br> 0.50<br> -<br> -  | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Flooding | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.40      |  |
| 612:<br>Liten               | <br>  85<br> <br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> 0.50                   | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                         |  |
| 613:<br>Lithic Haplocryands | <br>  55<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet           | <br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br> <br>                    |  |
| Alic Haplocryands           | <br> 20<br> <br> <br>                 | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> 1.00<br> 0.50<br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                | <br> <br> 1.00<br> 0.50<br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                         |  |
| Rock outcrop                | <br>  17<br>                          | <br> Not rated<br>                                                                                                                    |                             | <br> Not rated<br>                                                                                                          | <br> <br>                             | <br> Not rated<br>                                                                                                                    | <br> <br>                                       |  |
| 614:<br>Lithic Haplocryands | <br>  55<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet           | <br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> 0.50<br> <br> <br>                         |  |
| Alic Haplocryands           | <br> 20<br> <br> <br>                 | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                  | <br> 1.00<br> 0.50<br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                | <br> <br> 1.00<br> 0.50<br>           | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                             | <br> 0.50<br> <br>                              |  |
| Rock outcrop                | <br>  20<br>                          | <br> Not rated<br>                                                                                                                    |                             | <br> Not rated<br>                                                                                                          | <br> <br>                             | <br> Not rated<br>                                                                                                                    | <br> <br>                                       |  |
| 615:<br>Longmare            | <br>  80<br> <br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone           | 0.50                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> <br> 0.50<br> <br> <br> 0.39     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br> <br>                    |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.<br>of<br>map            | (Alaska criteria)                                                                                                           | 3                                 | Primitive camp areas (Alaska criteria)                                                                    |                                   | Foot and ATV trails (Alaska criteria)                                                                                | 3                                 |
|--------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                          | IIIap<br> unit<br> <br> _    | •                                                                                                                           | Value<br> <br> <br>               | Rating class and limiting features                                                                        | Value<br> <br>                    | Rating class and limiting features                                                                                   | Value                             |
| 616:<br>Longmare         | <br>   80<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> <br> 0.50<br> <br> <br> 0.39 | Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone        | <br> <br> 0.50<br> <br> <br> 0.39 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> <br> 0.50<br> <br> <br> |
| 617:<br>Mutnala          | 75<br> <br> <br>             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> 0.50<br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>                |
| 618:<br>Mutnala          | 80<br> <br>                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> 0.50<br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>                |
| 619:<br>Mutnala          | <br>   85<br> <br> <br> <br> | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                   | <br> 0.63<br> 0.50<br>            | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.63<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>       |
| 620:<br>Mutnala          | <br>   85<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> 1.00<br> 0.50                | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                      | <br> <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>       |
| 621:<br>Mutnala          | <br>   85<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>       |
| 622:<br>Mutnala          | <br>   85<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br>       |
| 623:<br>Mutnala          | <br>   45<br> <br> <br>      | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> <br> 1.00<br> 0.50           | Very limited:<br>Slope<br>Silty surface layer<br>dusty when dry and<br>slippery when wet                  | <br> <br> 1.00<br> 0.50<br>       | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                          | <br> <br> 1.00<br> 0.50<br>       |
| Starichkof               | <br>   35<br> <br> <br> <br> | Very limited:   Depth to saturated zone   Ponding   Excess surface   organic matter                                         | <br> 1.00<br> 1.00<br> 1.00       | Very limited:<br>  Depth to saturated zone<br>  Ponding<br> <br>                                          | <br> <br> 1.00<br> 1.00<br> <br>  | Very limited:   Depth to saturated zone   Excess surface   organic matter   Ponding                                  | <br> 1.00<br> 1.00<br> <br> 1.00  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct. of                                   | (Alaska criteria)                                                                                                                                | <b>;</b>                                            | Primitive camp areas (Alaska criteria)                                                                                                |                                           | Foot and ATV trails (Alaska criteria)                                                                                                              | 5                                              |
|--------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|                          | map<br> unit<br> <br>                     | Rating class and limiting features                                                                                                               | Value<br> <br> <br>                                 |                                                                                                                                       | Value<br> <br>                            | Rating class and limiting features                                                                                                                 | Value                                          |
| 623:<br>Slikok           | <br> <br> 20<br> <br> <br> <br> <br> <br> | <br>  Very limited:<br>  Depth to saturated zone<br>  Flooding<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Restricted permeability | <br>  1.00<br> 1.00<br> 1.00<br> 1.00<br>  1.00<br> | <br>  Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> 0.50<br> <br> | Very limited:   Depth to saturated zone   Excess surface   organic matter   Ponding   Silty surface layer   dusty when dry and   slippery when wet | <br>  1.00<br> 1.00<br>  1.00<br>  0.50<br>  1 |
| 624:<br>Naptowne         | <br>  80<br> <br>                         | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                                       | <br> <br> 0.50<br> <br>                             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                   | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                     | <br> <br> 0.50<br> <br>                        |
| 625:<br>Naptowne         | <br>  80<br> <br>                         | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                        | <br> <br> 0.50<br> <br>                             | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                             | <br> <br> 0.50<br> <br>                   |                                                                                                                                                    | <br> <br> 0.50<br> <br>                        |
| 626:<br>Naptowne         | <br> -<br>  80<br> <br> <br>              | Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope                                                                 | <br> 0.50<br> <br> <br> 0.16                        | Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope                                                      | <br> <br> 0.50<br> <br> <br> 0.16         | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                               | <br> <br> 1.00<br> 0.50<br>                    |
| 627:<br>Naptowne         | <br> <br>  80<br> <br> <br>               | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                            | <br> <br> 1.00<br> 0.50<br>                         | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> <br> <br> 1.00<br> 0.50<br> <br>     | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                               | <br> <br> 1.00<br> 0.50<br>                    |
| 628:<br>Naptowne         | <br>  80<br> <br> <br>                    | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                             | <br> 1.00<br> 0.50<br>                              | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                  | <br> <br> 1.00<br> 0.50<br> <br>          | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                               | <br> <br> 1.00<br> 0.50<br> <br>               |
| 629:<br>Naptowne         | <br>  80<br> <br> <br>                    | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                                       | <br> <br> 0.50<br> <br>                             | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                            | <br> <br> 0.50<br> <br>                   | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                     | <br> <br> 0.50<br> <br> <br>                   |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name        | Pct.                        | (Alaska criteria)                                                                                                                  | ;                                | Primitive camp areas (Alaska criteria)                                                                                             |                                       | Foot and ATV trails (Alaska criteria)                                                                                                             | 6                                |
|---------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                                 | map<br> unit<br> <br>       |                                                                                                                                    | Value<br> <br> <br>              | Rating class and limiting features                                                                                                 | Value<br> <br>                        | Rating class and limiting features                                                                                                                | Value                            |
| 630: Naptowne, moderately steep | <br> 45<br> <br> <br>       | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                               | <br> <br> 1.00<br> 0.50<br>      | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>      |
| Naptowne, strongly sloping      |                             | <br>  Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                         | <br> 0.96<br> 0.50<br>           | <br>  Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                         | <br> <br> 0.96<br> 0.50<br> <br>      | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> 1.00<br> 0.50<br>           |
| 631: Naptowne, strongly sloping |                             | Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet                                                   | <br> 0.63<br> 0.50<br>           | Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                               | <br> 0.63<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>      |
| Naptowne, gently sloping        |                             | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                         | <br> <br> 0.50<br> <br>          | Somewhat limited:<br>Silty surface layer<br>dusty when dry and<br>slippery when wet                                                | <br> <br> 0.50<br> <br>               | Somewhat limited:<br>Silty surface layer<br>dusty when dry and<br>slippery when wet                                                               | <br> 0.50<br>                    |
| 632:<br>Niklason                | <br> <br>  85<br> <br> <br> | Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                | <br> <br> 1.00<br> 0.50<br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> <br> 0.50<br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                    | <br> <br> 0.50<br> <br>          |
| 633:<br>Nikolaevsk              | <br> <br>  85<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> <br> 1.00<br> 0.50<br> <br> | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.78<br> 0.50<br>      |
| 634:<br>Nikolaevsk              | <br>  83<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> -<br> 1.00<br> 0.50<br> -        | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.78<br> 0.50<br> <br> |
| 635:<br>Nikolaevsk              | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br>      | <br> Very limited:<br>  Water erosion hazard<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.78<br> <br> 0.50 |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name                    | Pct.<br>of                            | (Alaska criteria)                                                                                                                                                                       | 3                                               | Primitive camp areas (Alaska criteria)                                                                                       |                                                 | Foot and ATV trails (Alaska criteria)                                                                                                                           | 3                                         |
|---------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                             | map<br> unit<br> <br>                 | Rating class and limiting features                                                                                                                                                      | Value                                           | Rating class and limiting features                                                                                           | Value<br> <br>                                  | Rating class and limiting features                                                                                                                              | Value                                     |
| 636:<br>Nikolai                             | <br>  90<br>  1<br>  1<br>  1<br>  1  | Very limited:   Depth to saturated zone   Excess surface   organic matter   Restricted permeability   Silty surface layer   dusty when dry and   slippery when wet                      | <br>  1.00<br> 1.00<br>  0.60<br>  0.50         | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                               | <br> <br> <br> 1.00<br> 0.50<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 1.00<br> <br> 0.50<br> |
| 637:<br>Nikolai, somewhat<br>poorly drained |                                       | Very limited:<br>  Excess surface<br>  organic matter<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> 1.00<br> <br> 0.60<br> 0.50<br> <br>       | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone  | <br> <br> 0.50<br> <br> <br> 0.28<br> <br>      | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> 1.00<br> <br> 0.50<br> <br>          |
| Tuxedni                                     | <br>  25<br> <br> <br> <br> <br>      | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated<br>  zone                                                             | <br> 0.50<br> <br> <br> 0.44                    | Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone                           | <br> 0.50<br> <br> <br> 0.44                    | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                       | <br> 0.50<br> <br> <br> <br>              |
| 638:<br>Puntilla                            | <br>  80<br>  81<br>   <br>           | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Restricted<br>  permeability                                                             | <br> <br> 0.50<br> <br> <br> 0.21               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                               | <br> <br> <br> 0.50<br> <br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> 0.50<br> <br> <br>              |
| 639:<br>Puntilla                            | <br>  85<br> <br> <br> <br> <br> <br> | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet   Restricted   permeability                                                                        | <br> <br> 1.00<br> 0.50<br> <br> <br> <br> 0.21 | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                 | <br> <br> 1.00<br> 0.50<br> <br>                | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                                                     | <br> <br> 1.00<br> 0.50<br> <br>          |
| 640:<br>Qutal                               | <br> <br>  77<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone                                                             | <br> <br> 0.50<br> <br> <br> 0.39               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone  | <br> <br> 0.50<br> <br> <br> 0.39               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> 0.50<br> <br> <br>              |
| 641:<br>Qutal                               | <br>  80<br> <br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone                                                             | <br> 0.50<br> <br> <br> 0.39                    | <br>  Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> <br> 0.50<br> <br> <br> 0.39               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> 0.50<br> <br> <br>              |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name       | Pct.                             | (Alaska criteria)                                                                                                                      | 3                                          | Primitive camp areas (Alaska criteria)                                                                                                |                                            | Foot and ATV trails<br>(Alaska criteria)                                                                             |                                  |  |
|--------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------|--|
|                                | map<br> unit<br> <br>            |                                                                                                                                        | Value                                      |                                                                                                                                       | Value<br> <br>                             | Rating class and   limiting features                                                                                 | Value                            |  |
| 642:<br>Qutal                  | <br>  80<br> <br> <br> <br> <br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.39<br> 0.37 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br> slippery when wet<br>  Depth to saturated zone<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.39<br> 0.37 | <br> Very limited:<br>  Water erosion hazard<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet  | <br> <br> 1.00<br> 0.50<br> <br> |  |
| 643:<br>Redoubt, terraces      | <br>  85<br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> 0.50<br>                              | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> 0.50<br>                    |  |
| 644:<br>Redoubt                | <br>  85<br> <br> <br>           | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                   | <br> 0.50<br> <br> <br> 0.16               | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                  | <br> <br> 0.50<br> <br> <br> 0.16          | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>           |  |
| 645:<br>Redoubt                | <br>  85<br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                  | <br> 1.00<br> 0.50<br>                     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>           |  |
| 646:<br>Redoubt, cool          | <br>  80<br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> <br> 0.50<br>                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 0.50<br>               |  |
| 647: Redoubt, moderately steep | <br>  45<br> <br> <br> <br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                           | <br> 1.00<br> 0.50<br>                     | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                          | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>           |  |
| Redoubt, gently sloping        | <br> 40<br> <br>                 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> 0.50<br>                              | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                            | <br> <br> 0.50<br> <br>                    | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                            | <br> 0.50<br>                    |  |
| 648:<br>Redoubt, cool          | <br> <br>  55<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                              | <br> <br> 0.50<br> <br> <br> 0.04          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                             | <br> <br> 0.50<br> <br> <br> 0.04          | <br> Very limited:<br>  Water erosion hazard<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet  | <br> <br> 1.00<br> 0.50<br>      |  |
| Tuxedni                        | <br>  35<br> <br> <br> <br> <br> |                                                                                                                                        | <br> 0.50<br> <br> <br> 0.44<br> 0.04      | Somewhat limited:   Silty surface layer   dusty when dry and   slippery when wet   Depth to saturated zone   Slope                    | <br> 0.50<br> <br> <br> 0.44<br> 0.04      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> 0.50<br> <br> <br>          |  |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct. of                                         | (Alaska criteria)                                                                                                                          | 3                                                       | Primitive camp areas<br>  (Alaska criteria)                                                            |                                                | Foot and ATV trails (Alaska criteria)                                                                                                                                    | 8                                              |
|--------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|                          | map<br> unit<br> <br>                           | :                                                                                                                                          | Value<br> <br> <br>                                     | Rating class and limiting features                                                                     | Value<br> <br>                                 | Rating class and limiting features                                                                                                                                       | Value                                          |
| 649:<br>Riverwash        | <br> <br> 100                                   | <br> <br> Not rated<br>                                                                                                                    | <br> <br>                                               | <br> <br> Not rated<br>                                                                                | <br> <br> <br>                                 | <br> <br> Not rated<br>                                                                                                                                                  | <br> <br> <br>                                 |
| 650:<br>Salamatof        | <br>  70<br> <br> <br>                          |                                                                                                                                            | <br> <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                       | <br> <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                                                                     | <br> 1.00<br> 1.00<br> <br> 1.00               |
| Doroshin                 | <br> -<br>  22<br> <br> <br> <br> <br>          |                                                                                                                                            | <br> 1.00<br> 1.00<br> <br> 0.50                        | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet | <br> 1.00<br> 0.50<br> <br> <br>               | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet               | <br> 1.00<br> 1.00<br> <br> <br> 0.50          |
| 651:<br>Salamatof        | <br> <br>  80<br> <br> <br>                     | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                       | <br> <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                       | <br> <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                                                                     | <br> <br> 1.00<br> 1.00<br> <br> 1.00          |
| 652:<br>Slikok           | <br>  85<br> <br> <br> <br> <br> <br> <br>      | Very limited:<br>  Depth to saturated zone<br>  Flooding<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Restricted permeability | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00      | , ,                                                                                                    | <br> 1.00<br> 1.00<br> 0.50<br> <br>           | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding<br>   Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50      |
| 653:<br>Slikok           | <br> <br>  82<br> <br> <br> <br> <br> <br> <br> |                                                                                                                                            | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 | , ,                                                                                                    | <br> <br> 1.00<br> 1.00<br> 0.50<br> <br> <br> |                                                                                                                                                                          | <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50 |
| 654:<br>Smithfha         | <br>  85<br> <br>                               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                             | <br> <br> 0.50<br>                                      | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet              | <br> <br> 0.50<br> <br>                        |                                                                                                                                                                          | <br> <br> 0.50<br>                             |
| 655:<br>Smithfha         | 90                                              | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                      | <br> <br> 1.00<br> 0.50<br> <br>                        | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet  | <br> <br> 1.00<br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                           | <br> <br> 0.50<br> <br> <br>                   |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name              | Pct.                                    | (Alaska criteria)                                                                                                                                               | 3                                              | Primitive camp areas (Alaska criteria)                                                                                             |                                            | Foot and ATV trails (Alaska criteria)                                                                                       | 3                                |
|---------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                                       | map<br> unit<br> <br>                   |                                                                                                                                                                 | Value<br> <br>                                 | <br>  Rating class and<br>  limiting features                                                                                      | Value<br> <br>                             | Rating class and   limiting features                                                                                        | Value                            |
| 656:<br>Smokey Bay                    | <br>  77<br>  1<br> <br> <br> <br> <br> | Very limited:   Depth to saturated zone   Restricted   permeability   Silty surface layer   dusty when dry and   slippery when wet                              | <br> <br> 1.00<br> 1.00<br> <br> 0.50          | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet                                     | <br> <br> 1.00<br> 0.50<br> <br> <br>      | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.86<br> 0.50<br> <br> |
| 657:<br>Smokey Bay                    | <br>  77<br> <br> <br> <br> <br> <br>   | Very limited:<br>  Depth to saturated zone<br>  Restricted<br>  permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 1.00<br> <br> 0.50<br> <br> 0.37 | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.37 | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.86<br> 0.50<br> <br>      |
| 658:<br>Snowdance                     | <br> <br>  90<br> <br> <br> <br>        | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                    | <br> <br> 1.00<br> <br> 0.50                   | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> <br> 1.00<br> <br> 0.50<br>      |                                                                                                                             | <br> <br> 0.86<br> <br> 0.50     |
| 659:<br>Soldotna                      | <br> <br>  90<br> <br>                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> <br> 0.50                            | <br>  Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                    | <br> <br> <br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> <br> 0.50<br>          |
| 660:<br>Soldotna                      | <br>  90<br> <br> <br>                  | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> 0.50                                 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> <br> 0.50<br>                    | Somewhat limited:<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                    | <br> <br> <br> 0.50<br>          |
| 661:<br>Soldotna                      | <br>  85<br> <br> <br> <br>             | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                       | <br> 0.63<br> 0.50                             | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.63<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 1.00<br> 0.50<br>      |
| 662:<br>Soldotna                      | <br>  85<br> <br> <br> <br>             | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                           | <br> <br> 1.00<br> 0.50<br>                    | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> <br> 1.00<br> 0.50<br>      |
| 663:<br>Soldotna, sandy<br>substratum | <br>  80<br> <br> <br> <br>             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                  | <br> <br> 0.50<br> <br>                        | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                     | <br> <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> <br> 0.50<br> <br>     |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name              | Pct.                        | (Alaska criteria)                                                                                                                 | eas                              | Primitive camp area (Alaska criteria)                                                                     | s                                 | Foot and ATV trails (Alaska criteria)                                                                                  | S                           |
|---------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|                                       | map<br> unit<br>            |                                                                                                                                   | Value                            |                                                                                                           | Value<br> <br>                    |                                                                                                                        | Value                       |
| 664:<br>Soldotna, sandy<br>substratum |                             | Somewhat limited:   Silty surface layer   dusty when dry and   slippery when wet   Slope                                          | 0.50                             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> <br> 0.50<br> <br> <br> 0.37 | <br> Very limited:<br>  Water erosion hazard<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet    | <br> <br> 1.00<br> 0.50     |
| 665: Soldotna, sandy substratum       |                             | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                             | <br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet   | <br> <br> 1.00<br> 0.50<br> |
| 666: Soldotna, sandy substratum       |                             | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> 0.50<br>                    | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> 0.50<br>                     |                                                                                                                        | 0.50                        |
| 667:<br>Soldotna, strongly<br>sloping |                             | Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope                                                  | <br> 0.50<br> <br> 0.16          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 0.50<br> <br> <br> 0.16      | <br> Very limited:<br>  Water erosion hazard  1<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.00<br> 0.50     |
| Soldotna, gently sloping              |                             | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                                                        | <br> 0.50<br>                    | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                 | 0.50                              | Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> 0.50<br>               |
| 668:<br>Soldotna, sandy<br>substratum |                             | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                      | <br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet   | <br> 1.00<br> 0.50          |
| Kenai                                 | <br>  40<br> <br> <br> <br> | Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet                              | <br> 1.00<br> 0.96<br> <br> 0.50 | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                              | <br> 1.00<br> 0.50<br> <br>       | Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet        | <br> 1.00<br> 0.50<br>      |
| 669: Soldotna, sandy substratum       | <br> 55<br> <br>            | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                    | <br> <br> 0.50                   | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                         | <br> <br> 0.50              |
| Kenai                                 | <br>  40<br> <br> <br> <br> | <br>  Somewhat limited:<br>  Restricted<br>  permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 0.96<br> <br> 0.50          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>        | <br> 0.50<br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                         | <br> 0.50<br> <br> <br>     |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | <br> Pct.<br>  of<br> map            | (Alaska criteria)                                                                                                                                                  | 3                                         | Primitive camp areas (Alaska criteria)                                                                                  |                                       | Foot and ATV trails<br>  (Alaska criteria)                                                                                               | 6                                         |
|--------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | unit                                 |                                                                                                                                                                    | Value                                     | Rating class and limiting features                                                                                      | Value<br> <br>                        | Rating class and limiting features                                                                                                       | Value                                     |
| 670:<br>Soldotna         | <br> <br>  50<br> <br> <br>          | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                          | <br> <br> 0.63<br> 0.50                   | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet               | <br> <br> <br> 0.63<br> 0.50          | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                     | <br> <br> <br> 1.00<br> 0.50<br>          |
| Kichatna                 | <br>  40<br> <br> <br> <br>          | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                          | <br> 0.63<br> 0.50<br>                    | Somewhat limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                | <br> <br> 0.63<br> 0.50<br> <br>      | <br>  Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                    | <br> 1.00<br> 0.50<br>                    |
| 671:<br>Soldotna         | <br>  50<br> <br> <br> <br>          | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                   | <br> <br> 1.00<br> 0.50<br>               | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                            | <br> <br> 1.00<br> 0.50<br>           | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                              | <br> 1.00<br> 0.50<br>                    |
| Kichatna                 | <br>  40<br> <br> <br> <br> <br>     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                              | <br> 1.00<br> 0.50<br>                    | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                   | <br> <br> 1.00<br> 0.50<br> <br>      | <br> Very limited:<br>  Water erosion hazard 1.0<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                 | <br> <br> 00<br> 0.50<br> <br>            |
| 672:<br>Soldotna         | <br>  55<br> <br> <br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                     | <br> 0.50<br>                             | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                           | <br> <br> 0.50<br> <br>                   |
| Nikolai                  | 45<br> <br> <br> <br> <br> <br> <br> | Very limited:   Depth to saturated zone   Excess surface   organic matter   Restricted permeability   Silty surface layer   dusty when dry and   slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.60<br> 0.50 | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet                  | <br> 1.00<br> 0.50<br> <br> <br> <br> | Very limited:   Depth to saturated zone   Excess surface   organic matter   Silty surface layer   dusty when dry and   slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50<br> <br> |
| 673:<br>Spenard          | <br> <br>  89<br> <br> <br> <br>     | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet                                                             | <br> <br> 1.00<br> 0.50<br>               | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet                  | <br> <br> <br> 1.00<br> 0.50<br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> <br> 1.00<br> 0.50<br>               |
| 674:<br>Spenard          | <br>  67<br> <br> <br> <br> <br>     | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                            | <br> 1.00<br> 0.50<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> <br> 1.00<br> 0.50<br> <br>          |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name     | Pct.                                   | (Alaska criteria)                                                                                                                                          | 6                                                  | Primitive camp areas (Alaska criteria)                                                                                                           |                                                | Foot and ATV trails (Alaska criteria)                                                                | 3                                         |
|------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                              | map<br> unit<br> <br>                  |                                                                                                                                                            | Value                                              |                                                                                                                                                  | Value<br> <br>                                 | Rating class and limiting features                                                                   | Value                                     |
| 675:<br>Spenard              | <br>  87<br> <br> <br> <br> <br>       | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                    | <br> 1.00<br> <br> 0.63<br> 0.50                   | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> <br> 0.63<br> 0.50<br>      | zone Water erosion hazard                                                                            | <br> <br> 1.00<br> <br> 1.00<br> 0.50     |
| 676:<br>Starichkof           | <br>   60<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                                       | <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                                                                 | <br> <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding | <br> 1.00<br> 1.00<br> <br> 1.00          |
| Doroshin                     | <br>   35<br> <br> <br> <br> <br> <br> | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50                   | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> 1.00<br> 0.50<br> <br> <br>               | organic matter                                                                                       | <br> 1.00<br> 1.00<br> <br> 0.50          |
| 677:<br>Starichkof           | <br>   75<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                                       | <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                                                                 | <br> <br> 1.00<br> 1.00<br>                    | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding      | <br> <br> 1.00<br> 1.00<br> <br> 1.00     |
| 678:<br>Starichkof           | <br>   82<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                                       | <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                                                                 | <br> <br> 1.00<br> 1.00<br>                    | organic matter                                                                                       | <br> <br> 1.00<br> 1.00<br> <br> 1.00     |
| 679:<br>Starichkof, forested | <br>   85<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                                       | <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                                                                 | <br> <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding | <br> <br> 1.00<br> 1.00<br> <br> 1.00     |
| 680:<br>Starichkof           | <br>   45<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                                                       | <br> 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>                                                                                 | <br> <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding | <br> -<br> 1.00<br> 1.00<br> -<br> 1.00   |
| Slikok                       | <br>   30<br> <br> <br> <br> <br> <br> | Very limited:   Depth to saturated zone   Flooding   Ponding   Excess surface   organic matter   Restricted permeability                                   | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 | <br>  Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope | <br> 1.00<br> 1.00<br> 0.50<br> <br> <br> 0.16 |                                                                                                      | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50 |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.<br>of<br>map                | (Alaska criteria)                                                                                                       | 3                                | Primitive camp areas (Alaska criteria)                                                         |                                  | Foot and ATV trails (Alaska criteria)                                                                                   | 3                                     |
|--------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|                          | unit                             | Rating class and limiting features                                                                                      | Value<br> <br>                   | Rating class and limiting features                                                             | Value<br> <br>                   | Rating class and limiting features                                                                                      | Valu                                  |
| 680:<br>Naptowne         | <br> <br>  25<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> <br> 0.50<br> <br>     | Somewhat limited:<br>Silty surface layer<br>dusty when dry and<br>slippery when wet            | <br> <br> <br> 0.50<br> <br>     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> <br> 0.50<br> <br>          |
| 681:<br>Starichkof       | <br>  50<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                    | <br> 1.00<br> 1.00<br> 1.00      | Very limited: Depth to saturated zone Ponding                                                  | <br> <br> 1.00<br> 1.00<br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                    | <br> <br> 1.00<br> 1.00<br> <br> 1.00 |
| Spenard                  | <br>  42<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 0.50<br>           | Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet | <br> <br> 1.00<br> 0.50<br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 1.00<br> 0.50<br> <br>      |
| 682:<br>Susitna          | <br>  85<br> <br> <br> <br>      | Very limited:<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                     | <br> 1.00<br> 0.50<br>           | Somewhat limited: Silty surface layer dusty when dry and slippery when wet                     | <br> <br> 0.50<br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br> <br>          |
| Riverwash                | <br>  5                          | <br> Not rated                                                                                                          |                                  | <br> Not rated                                                                                 | <br>                             | <br> Not rated                                                                                                          |                                       |
| 683:<br>Susitna          | <br> <br>  85<br> <br> <br> <br> | Very limited:   Flooding   Silty surface layer   dusty when dry and   slippery when wet                                 | <br> <br> <br> 1.00<br> 0.50<br> | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> <br> 0.50<br> <br>     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br>               |
| 684:<br>Talkeetna        | <br>  94<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.50<br>               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                          | <br> <br> 0.50<br> <br>               |
| 685:<br>Talkeetna        | <br>  90<br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                   | <br> <br> 1.00<br> 0.50<br>      | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                   | <br> <br> 1.00<br> 0.50<br>      |                                                                                                                         | <br> <br> 1.00<br> 0.50<br>           |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name     | Pct.<br>of                            | (Alaska criteria)                                                                                                                | 3                               | Primitive camp areas (Alaska criteria)                                                                                                 |                                      | Foot and ATV trails (Alaska criteria)                                                                                            | \$                                              |
|------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|                              | map<br> unit<br> <br>                 | !                                                                                                                                | Value                           | Rating class and limiting features                                                                                                     | Value<br> <br>                       | Rating class and limiting features                                                                                               | Value                                           |
| 686:<br>Talkeetna            | <br> <br>  55<br> <br> <br>           | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                             | <br> <br> 1.00<br> 0.50<br>     | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                           | <br> <br> <br> 1.00<br> 0.50<br>     | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                      | <br> <br> 1.00<br> 0.50<br>                     |
| Starichkof                   | <br>  40<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Ponding<br>  Excess surface<br>  organic matter                             | <br> 1.00<br> 1.00<br> 1.00     | Very limited: Depth to saturated zone Ponding                                                                                          | <br> -<br> 1.00<br> 1.00<br> -<br> - | <br> Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Ponding                             | <br> 1.00<br> 1.00<br> <br> <br> 1.00           |
| 687:<br>Tangerra             | <br>  80<br> <br> <br> <br>           | Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet               | <br> <br> 1.00<br> 0.50<br>     | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                | <br> -<br> 1.00<br> 0.50<br> -       | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet          | <br> <br> 1.00<br> 0.50<br>                     |
| 688:<br>Beaches, tidal flats | <br> <br>  90                         | <br> <br> Not rated                                                                                                              |                                 | <br> <br> Not rated                                                                                                                    | <br> <br> <br>                       | <br> <br> Not rated                                                                                                              |                                                 |
| 689:<br>Tlikakila            | <br> <br>  90<br> <br> <br> <br> <br> | <br> Somewhat limited:<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> <br> 0.93<br> <br> 0.50    | <br> Somewhat limited:<br>  Depth to saturated<br>  zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> 0.93<br> <br> 0.50<br>     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated<br>  zone | <br> <br> 0.50<br> <br> <br> 0.27               |
| 690:<br>Tlikakila            | <br> <br>  87<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Depth to saturated zone<br> Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> 0.93<br> 0.50         | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet            | <br> <br> 0.93<br> 0.50<br>          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone      | <br> <br> 0.50<br> <br> <br> 0.27               |
| 691:<br>Tlikakila            | <br>  85<br> <br> <br> <br> <br>      |                                                                                                                                  | <br> 0.93<br> 0.63<br> 0.50<br> | <br> Somewhat limited:<br>  Depth to saturated zone<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet |                                      |                                                                                                                                  | <br> <br> 1.00<br> 0.50<br> <br> <br> <br> 0.27 |
| 692:<br>Tokositna            | <br> <br>  85<br> <br> <br>           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> <br> 0.50<br>         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> <br> <br> 0.50<br> <br>         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> <br> 0.50<br>                         |
| 693:<br>Tokositna            | <br> <br>  90<br> <br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> 0.50<br> <br>         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                         | <br> <br> <br> 0.50<br> <br>         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                   | <br> <br> <br> 0.50<br> <br>                    |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.   Camp and Picnic Areas  <br>  of   (Alaska criteria) |                                                                                                                                                                                         | Primitive camp areas (Alaska criteria)     |                                                                                                                                        |                                                 | <br>  Foot and ATV trails<br>  (Alaska criteria)                                                                                                           |                                   |
|--------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                          | map<br> unit<br> <br>                                      |                                                                                                                                                                                         | Value                                      |                                                                                                                                        | Value<br> <br>                                  |                                                                                                                                                            | Value                             |
| 694:<br>Tokositna        | <br> <br>  90<br> <br> <br>                                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                                                                               | <br> <br> 0.50<br> <br> <br> 0.16          | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Slope                              | <br> <br> 0.50<br> <br> <br> 0.16               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> <br> 0.50<br> <br> <br> |
| 695:<br>Truuli           | <br>  88<br> <br> <br> <br> <br> <br> <br>                 | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Restricted permeability<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50  | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                | <br> 1.00<br> 0.50<br> <br> <br>                | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50  |
| 696:<br>Tutka            | <br> <br>  45<br> <br> <br>                                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                   | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                  | <br> <br> <br> 1.00<br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> 0.50<br> <br>           |
| Kasitsna                 | <br>  40<br> <br> <br>                                     | Very limited:   Slope   Silty surface layer   dusty when dry and   slippery when wet                                                                                                    | <br> 1.00<br> 0.50<br>                     | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                           | <br> <br> 1.00<br> 0.50<br>                     | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                                                | <br> 1.00<br> 0.50<br>            |
| Rock outcrop             | 15                                                         | <br> Not rated                                                                                                                                                                          | <br>                                       | <br> Not rated                                                                                                                         | <br>                                            | <br> Not rated                                                                                                                                             |                                   |
| 697:<br>Tutka            | <br> <br>  55<br> <br> <br>                                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                   | <br> <br> 1.00<br> 0.50<br>                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                  | <br> <br> <br> 1.00<br> 0.50<br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> <br> 0.50<br> <br>      |
| Portgraham               | <br>  30<br> <br> <br>                                     | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                                                   | <br> 1.00<br> 0.50<br>                     | Very limited: Slope Silty surface layer dusty when dry and slippery when wet                                                           | <br> <br> 1.00<br> 0.50<br>                     | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                       | <br> <br> 1.00<br> 0.50<br>       |
| 698:<br>Tuxedni          | <br>  85<br> <br> <br>                                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone                                                             | <br> 0.50<br> <br> <br> 0.44               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone            | <br> <br> 0.50<br> <br> <br> 0.44               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> 0.50<br> <br>           |
| 699:<br>Tuxedni          | <br>  85<br> <br> <br> <br> <br>                           | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone                                                  | <br> <br> 0.63<br> 0.50<br> <br> <br> 0.44 | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> <br> 0.63<br> 0.50<br> <br> <br> <br> 0.44 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> 0.50<br> <br> <br> <br> |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| and soil name               |                                  | ct.   Camp and Picnic Areas  <br>of   (Alaska criteria)                                                                               |                                   | Primitive camp areas<br>(Alaska criteria)                                                                                   |                                        | Foot and ATV trails<br>(Alaska criteria)                                                                                              |                                            |
|-----------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|                             | map<br> unit<br> <br>            | :                                                                                                                                     | Value<br> <br> <br>               | Rating class and limiting features                                                                                          | Value<br> <br>                         | Rating class and limiting features                                                                                                    | Value                                      |
| 700:<br>Tuxedni, warm       | <br> <br>  85<br> <br> <br>      | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone           | <br> <br> 0.50<br> <br> <br> 0.44 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Depth to saturated zone | <br> <br> <br> 0.50<br> <br> <br> 0.44 | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> <br> 0.50<br> <br> <br>          |
| 701:<br>Typic Cryaquents    | <br>  95<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Flooding<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> 0.50       | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet     | <br> <br> 1.00<br> 0.50<br> <br>       | <br> Very limited:<br>  Depth to saturated zone<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet<br>  Flooding | <br> 1.00<br> 0.50<br> <br> <br> <br> 0.40 |
| 702:<br>Typic Cryopsamments | <br> 84<br> <br> <br>            | <br> Very limited:<br>  Slope<br>  Sandy surface layer<br>  easily displaced                                                          | <br> 1.00<br> 0.50                | <br> Very limited:<br>  Slope<br>                                                                                           | <br> <br> 1.00<br> <br>                | <br> Somewhat limited:<br>  Sandy surface layer<br>  easily displaced                                                                 | <br> <br> 0.50<br> <br>                    |
| 703:<br>Typic Cryorthents   | <br>  80<br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br> <br>       | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> <br> 1.00<br> 0.50<br>                |
| 704:<br>Urban land          | <br>  85<br>                     | <br> <br> Not rated<br>                                                                                                               | <br> <br>                         | <br> <br> Not rated<br>                                                                                                     | <br> <br> <br>                         | <br> <br> Not rated<br>                                                                                                               | <br> <br>                                  |
| 705:<br>Water, fresh        | <br> 100<br>                     | <br> Not rated<br>                                                                                                                    | <br> <br>                         | <br> Not rated<br>                                                                                                          | <br> <br>                              | <br> Not rated<br>                                                                                                                    | <br> <br>                                  |
| 706:<br>Whitsol             | 90                               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> 0.50<br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br> <br>                | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br> <br>                    |
| 707:<br>Whitsol             | 90                               | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> 0.50<br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                              | <br> <br> 0.50<br>                     | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                        | <br> <br> 0.50<br>                         |
| 708:<br>Whitsol             | <br> <br> 85<br> <br> <br>       | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                             | <br> 0.63<br> 0.50                | <br> Somewhat limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                   | <br> <br> 0.63<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> <br> 1.00<br> 0.50<br>                |
| 709:<br>Whitsol             | <br>  85<br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                 | <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                       | <br> <br> 1.00<br> 0.50<br>            | <br> Very limited:<br>  Water erosion hazard<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                  | <br> <br> 1.00<br> 0.50<br>                |

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

| Map symbol and soil name | Pct.<br>of<br>map                          | (Alaska criteria)                                                                                                                                          | 3                                    | Primitive camp areas<br>(Alaska criteria)                                                              |                                            | Foot and ATV trails<br>(Alaska criteria)                                                                                                                   |                                      |
|--------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
|                          | unit                                       | •                                                                                                                                                          | Value<br> <br>                       | Rating class and limiting features                                                                     | Value<br> <br>                             | Rating class and limiting features                                                                                                                         | Value<br> <br>                       |
| 710:<br>Whitsol          | <br> <br>  85<br> <br> <br>                | <br> Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                      | <br> <br> 1.00<br> 0.50<br>          | Very limited:<br>  Slope<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet       | <br> <br> <br> 1.00<br> 0.50<br> <br>      | Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet                                                                | <br> <br> 1.00<br> 0.50<br>          |
| 711:<br>Whitsol          | <br> 55<br> <br>                           | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> 0.50<br>                        | Somewhat limited:<br>Silty surface layer<br>dusty when dry and<br>slippery when wet                    | <br> <br> 0.50<br>                         | <br> Somewhat limited:<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet                                                             | <br> <br> 0.50<br>                   |
| Doroshin                 | <br>  30<br> <br> <br> <br> <br> <br> <br> | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50<br> | Very limited:   Depth to saturated zone   Silty surface layer   dusty when dry and   slippery when wet | <br> 1.00<br> 0.50<br> <br> <br> <br> <br> | Very limited:<br>  Depth to saturated zone<br>  Excess surface<br>  organic matter<br>  Silty surface layer<br>  dusty when dry and<br>  slippery when wet | <br> 1.00<br> 1.00<br> <br> 0.50<br> |

**Table 16. Ecological Site-Soils Correlation** 

| Map symbol and soil name         | Ecological<br>  site name                                                            | Ecological<br>  site type<br>       | Ecological<br>  site ID              |
|----------------------------------|--------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|
| 501:<br>Aquic Cryofluvents       |                                                                                      | <br> <br>  Forestland<br> <br>      | <br> <br> -<br> F170XY004AK<br> <br> |
| 502: Aquic Cryofluvents, shallow | <br> <br> none assigned                                                              | <br> <br>                           |                                      |
| 503:<br>Badland, sea cliffs      | <br> -<br> none assigned<br>                                                         | <br> <br>                           | <br>                                 |
| 504:<br>Badland, sea cliffs      | <br> <br> none assigned                                                              | <br> <br>                           | <br>                                 |
| Typic Cryorthents                | ।<br> Alpine Ridges<br>।                                                             | l<br>  Rangeland<br>                | <br> R169XY101AK                     |
| 505:<br>Beaches                  | <br> -<br> none assigned                                                             | <br> <br>                           | <br> <br>                            |
| 506:<br>Beluga                   | <br> -<br> Lower Bench Toe Slopes                                                    | <br> <br>  Rangeland<br>            | <br> <br> R170XD424AK<br>            |
| 507:<br>Beluga                   | <br> -<br> Lower Bench Toe Slopes                                                    | <br>  Rangeland<br>                 | <br> R170XD424AK<br>                 |
| 508:<br>Beluga                   | <br> -<br> Lower Bench Toe Slopes                                                    | <br>  Rangeland<br>                 | <br> R170XD424AK<br>                 |
| 509:<br>Beluga                   | <br> -<br> Lower Bench Toe Slopes                                                    | <br> <br>  Rangeland<br>            | <br> <br> R170XD424AK                |
| Mutnala                          | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense  | <br>  Forestland<br>                | F170XD443AK<br> <br>                 |
| 510:<br>Beluga                   | <br> <br> Lower Bench Toe Slopes                                                     | <br> <br>  Rangeland                | <br> <br> R170XD424AK                |
| Smokey Bay                       | <br> Lower Bench Toe Slopes                                                          | <br>  Rangeland<br>                 | <br> R170XD424AK                     |
| 511:<br>Beluga                   | <br> -<br> Lower Bench Toe Slopes                                                    | <br> <br>  Rangeland<br>            | <br> <br> R170XD424AK                |
| Smokey Bay                       | I<br> Lower Bench Toe Slopes<br>I                                                    | ।<br>  Rangeland<br>।               | <br> R170XD424AK                     |
| 512:<br>Benka                    | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus | <br>  Forestland<br>                | <br> F170XY435AK<br>                 |
| 513:<br>Benka                    | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus | <br> <br>  Forestland<br> <br>      | <br> <br> F170XY435AK<br> <br>       |
| 514:<br>Benka                    | <br>                                                                                 | <br> <br>  Forestland<br> <br> <br> | <br> <br> F170XY435AK<br> <br>       |
|                                  | '                                                                                    | 1                                   | •                                    |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name           | Ecological<br>  site name<br>                                                                        | Ecological<br>  site type<br>  | Ecological<br>  site ID        |
|---------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| 515:<br>Benka                         | <br> <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus            | <br> <br>  Forestland<br> <br> | <br> <br> F170XY435AK<br> <br> |
| 516:<br>Benka                         | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus                 | <br> <br>  Forestland<br> <br> | <br> F170XY435AK<br> <br>      |
| 517:<br>Benka, strongly sloping       | none assigned                                                                                        |                                |                                |
| Benka, gently sloping                 | <br> none assigned                                                                                   | <br>                           |                                |
| 518:<br>Boxcar                        | <br> <br> Rolling Uplands<br>                                                                        | <br> <br>  Rangeland<br>       | <br> R170XD427AK<br>           |
| 519:<br>Boxcar                        | <br> Rolling Uplands                                                                                 | <br>  Rangeland                | <br> R170XD427AK               |
| 520:<br>Boxcar                        | <br> <br> Rolling Uplands<br>                                                                        | <br> <br>  Rangeland<br>       | <br> -<br> R170XD427AK<br>     |
| 521:<br>Boxcar, cool                  | <br> Rolling Uplands                                                                                 | <br>  Rangeland                | <br> R170XD427AK               |
| 522:<br>Boxcar, cool                  | <br> -<br> Rolling Uplands                                                                           | <br> <br>  Rangeland<br>       | <br> <br> R170XD427AK          |
| 523:<br>Chenega                       | <br> Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br> <br>      | <br> F170XY004AK<br> <br>      |
| 524:<br>Chenega, cool                 | <br> Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br> <br> <br> | <br> F170XY004AK<br> <br>      |
| 525:<br>Chenega, occasionally flooded | <br> Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br> <br>      | <br> F170XY004AK<br> <br>      |
| 526:<br>Chulitna                      | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus                 | <br>  Forestland<br> <br> <br> | <br> F170XY435AK<br> <br>      |
| 527:<br>Chulitna                      | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus<br>             | <br>  Forestland<br> <br> <br> | <br> F170XY435AK<br> <br>      |
| 528:<br>Chulitna                      | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus<br>             | <br>  Forestland<br> <br> <br> | <br> F170XY435AK<br> <br>      |
|                                       |                                                                                                      |                                |                                |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name | Ecological<br>  site name<br>                                                                   | Ecological<br>  site type | Ecological<br>  site ID<br>      |
|-----------------------------|-------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|
| 529:<br>Chulitna            | <br> Picea ×lutzii-Betula<br> papyrifera/Gymnocarpium<br> dryopteris-Rubus pedatus              | <br>  Forestland<br>      | <br> -<br> F170XY435AK<br> -<br> |
| 530:<br>Chunilna            | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | Forestland                | <br> F170XY018AK<br> <br>        |
| 531:<br>Chunilna            | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | Forestland                | <br> F170XY018AK<br> <br> <br>   |
| 532:<br>Chunilna, cool      | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br>  Forestland<br>      | <br> F170XY018AK<br> <br>        |
| 533:<br>Chunilna, cool      | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br>  Forestland<br>      | <br> F170XY018AK<br> <br>        |
| 534:<br>Clam Gulch          | <br> Picea mariana/Empetrum<br>  nigrum-Betula nana<br>                                         | <br>  Forestland<br>      | <br> F170XY412AK<br>             |
| 535:<br>Clunie              | <br> <br> Ramensk's Sedge<br>                                                                   | Rangeland                 | <br> R170XY402AK<br>             |
| 536:<br>Coal Creek          | <br> Picea mariana/Empetrum<br>  nigrum-Betula nana                                             | <br>  Forestland<br>      | <br> F170XY412AK<br>             |
| 537:<br>Coal Creek          | <br> Picea mariana/Empetrum<br>  nigrum-Betula nana                                             | <br>  Forestland          | <br> F170XY412AK<br>             |
| 538:<br>Coal Creek          | <br> Picea mariana/Empetrum nigrum- <br>  Betula nana                                           | Forestland                | <br> F170XY412AK<br>             |
| 539:<br>Cohoe               | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus            | <br>  Forestland<br>      | <br> F170XY435AK<br> <br>        |
| 540:<br>Cohoe               | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus            | <br>  Forestland<br>      | <br> F170XY435AK<br> <br>        |
| 541:<br>Cohoe               | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus<br>        | <br>  Forestland<br>      | <br> F170XY435AK<br> <br> <br>   |
|                             |                                                                                                 | -                         | •                                |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name          | Ecological<br>  site name                                                                  | Ecological<br>  site type<br>  | Ecological<br>  site ID        |
|--------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| 542:<br>Cohoe                        | <br> -<br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus | <br> <br>  Forestland<br> <br> | <br> <br> F170XY435AK<br> <br> |
| 543:<br>Cohoe                        | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br> <br>  Forestland<br> <br> | <br> F170XY435AK<br> <br>      |
| 544:<br>Cohoe                        | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br>  Forestland<br> <br> <br> | <br> F170XY435AK<br>           |
| 545:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br>  Forestland<br>           | <br> F170XC447AK<br> <br>      |
| 546:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>           |
| 547:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| 548:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| 549:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| 550:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| 551:<br>Cohoe, moderately steep      | none assigned                                                                              | <br>                           |                                |
| Cohoe, gently sloping                | <br> none assigned<br>                                                                     | <br> <br>                      |                                |
| 552:<br>Cohoe, dry, moderately steep | none assigned                                                                              |                                |                                |
| Cohoe, dry, gently sloping           | <br> none assigned<br>                                                                     | <br> <br>                      |                                |
| 553:<br>Cohoe, dry                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br>  Forestland<br> <br>      | <br> F170XC447AK<br>           |
| Kenai                                | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica<br>   | <br>  Forestland<br> <br> <br> | F170XC447AK<br> <br>           |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol           | Ecological                                  | Ecological        | Ecological           |
|----------------------|---------------------------------------------|-------------------|----------------------|
| and soil name        | site name                                   | site type         | site ID              |
|                      |                                             |                   | ļ                    |
| 554:                 | <br>                                        | İ                 | <br>                 |
| Cohoe, dry           | l<br>IPicea glauca-Betula                   | l<br>  Forestland | <br> F170XC447AK     |
| Conce, ary           | papyrifera/Gymnocarpium                     |                   |                      |
|                      | dryopteris-Cornus suecica                   |                   | İ                    |
|                      | İ                                           |                   | j                    |
| Kenai                | Picea glauca-Betula                         | Forestland        | F170XC447AK          |
|                      | papyrifera/Gymnocarpium                     |                   |                      |
|                      | dryopteris-Cornus suecica                   |                   |                      |
| 555:                 | <br>                                        |                   | <br>                 |
| Cohoe, dry           | ı<br>IPicea glauca-Betula                   | ।<br>  Forestland | IF170XC447AK         |
| 3030, 4,             | papyrifera/Gymnocarpium                     |                   |                      |
|                      | dryopteris-Cornus suecica                   |                   | j                    |
|                      | ĺ                                           |                   |                      |
| Nikolai              |                                             | Forestland        | F170XD414AK          |
|                      | canadensis                                  |                   |                      |
| 556:                 |                                             | <br>              | <br>                 |
|                      | <br> Picea glauca-Betula                    | <br>  Forestland  | F170XC447AK          |
| •                    | papyrifera/Gymnocarpium                     |                   | j                    |
|                      | dryopteris-Cornus suecica                   |                   |                      |
| All I                |                                             |                   |                      |
| Nikolai              | Picea ×iutzii/Calamagrostis<br>  canadensis | Forestland        | F170XD414AK          |
|                      | Canadensis<br>                              |                   | <br>                 |
| 557:                 |                                             |                   | İ                    |
| Cytex Creek          | Mountain Slopes, Drainages                  | Rangeland         | R170XY106AK          |
|                      | ļ                                           |                   |                      |
| 558:<br>Doroshin     | <br>                                        | Danasland         | <br>                 |
| Dorosnin             | I Complex                                   | Rangeland         | R170XY400AK          |
| 559:                 | <br>                                        |                   | <br>                 |
| Doroshin             | Wetland Complex                             | Rangeland         | R170XY400AK          |
|                      |                                             |                   | İ                    |
| 560:                 |                                             | <br>  Danas land  | <br> D400\/\/404.4\/ |
| Dystrocryepts        | Alpine Ridges<br> -                         | Rangeland         | R169XY101AK          |
| Typic Cryorthents    | I<br> Alpine Ridaes                         | <br>  Rangeland   | I<br>IR169XY101AK    |
|                      |                                             | ĺ                 | j                    |
| Iliamna, cool        | Alpine Ridges                               | Rangeland         | R169XY101AK          |
| EC1.                 |                                             |                   |                      |
| 561: Foreland        | <br> Picea mariana/Empetrum                 | l<br>I Forestland | <br> F170XY412AK     |
|                      | nigrum-Betula nana                          |                   |                      |
|                      |                                             |                   | İ                    |
| 562:                 |                                             |                   | <u> </u>             |
| Foreland             |                                             | Forestland        | F170XY412AK          |
|                      | nigrum-Betula nana                          |                   |                      |
| Soldotna             | l<br>lPicea glauca-Retula                   | l<br>l Forestland | <br> F170XC447AK     |
| Coldonia             | papyrifera/Gymnocarpium                     |                   |                      |
|                      | dryopteris-Cornus suecica                   |                   | İ                    |
|                      | į į                                         | j                 | j                    |
| Starichkof           | Wetland Complex                             | Rangeland         | R170XY400AK          |
| E60:                 |                                             |                   |                      |
| 563:<br>Pits, gravel | l<br>Inone assigned                         | <br>              | <br>                 |
| . 1.0, gravor        |                                             |                   | I<br>                |
| 564:                 | İ                                           |                   | j                    |
| Iliamna              | Rolling Uplands                             | Rangeland         | R170XD427AK          |
| 505                  |                                             |                   |                      |
| 565:<br>Iliamna      | <br> Rolling Unlands                        | <br>  Rangeland   | <br> R170XD427AK     |
|                      |                                             |                   |                      |
|                      | 1                                           |                   |                      |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol and soil name | Ecological<br>  site name                                                                        | Ecological<br>  site type<br> | Ecological<br>  site ID<br>_ |
|--------------------------|--------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|
| 566:<br>Iliamna          | <br> <br> Rolling Uplands                                                                        | <br> <br>  Rangeland          | <br> <br> R170XD427AK        |
| 567:<br>Iliamna, cool    | <br>  Alpine Ridges                                                                              | <br> <br>  Rangeland          | <br> <br> R169XY101AK        |
| 568:<br>Island           | <br>  Shallow Kettles                                                                            | <br> <br>  Rangeland          | <br> <br> R170XD407AK        |
| 569:<br>Island           | <br>  Shallow Kettles                                                                            | <br> <br>  Rangeland          | <br> <br> R170XD407AK        |
| 570:<br>Island           | Shallow Kettles                                                                                  | <br> <br>  Rangeland          | <br> <br> R170XD407AK        |
| 571:<br>Island           | Shallow Kettles                                                                                  | <br> <br>  Rangeland          | <br> <br> R170XD407AK        |
| 572:<br>Island, forested | <br>Picea ×lutzii/Salix<br>  barclayi/Calamagrostis<br>  canadensis-Chamerion<br>  angustifolium | <br>  Forestland<br>          | <br> F170XD416AK<br>         |
| 573:<br>Kachemak         | Loamy Slopes                                                                                     | <br> <br>  Rangeland          | <br> <br> R170XY201AK        |
|                          | <br> Mountain Slopes<br>                                                                         | <br>  Rangeland<br>           | <br> R170XY103AK<br>         |
| 574:<br>Kachemak         | Loamy Slopes                                                                                     | <br>  Rangeland<br>           | <br> R170XY201AK<br>         |
|                          | Mountain Slopes                                                                                  | Rangeland                     | R170XY103AK                  |
| 575:<br>Kachemak         | Loamy Slopes                                                                                     | <br>  Rangeland<br>           | <br> R170XY201AK<br>         |
| 576:                     | Mountain Slopes                                                                                  | Rangeland                     | R170XY103AK                  |
| Kachemak                 |                                                                                                  | <br>  Rangeland<br>           | <br> R170XY201AK<br>         |
| 577:                     | Mountain Slopes<br> <br>                                                                         | Rangeland<br> <br>            | R170XY103AK<br> <br>         |
| Kachemak                 | j                                                                                                | <br>  Rangeland<br>           | R170XY201AK<br>              |
| 578:                     | Mountain Slopes                                                                                  | Rangeland<br> <br>            | R170XY103AK<br> <br>         |
| Kachemak, cool           | į .                                                                                              | Rangeland                     | R170XD427AK<br>              |
| 579:                     | Mountain Slopes<br> <br>                                                                         | Rangeland<br> <br>            | R170XY103AK<br> <br>         |
| Kachemak, cool           |                                                                                                  | Rangeland                     | R170XD427AK                  |
| 580:                     | Mountain Slopes<br> <br>                                                                         | Rangeland<br> <br>            | R170XY103AK<br> <br>         |
| Kachemak, cool           |                                                                                                  | Rangeland                     | R170XD427AK                  |
|                          | Mountain Slopes<br>                                                                              | Rangeland<br>                 | R170XY103AK<br>              |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name | Ecological<br>site name                                                                   | Ecological<br>  site type<br>       | Ecological<br>  site ID<br> |
|-----------------------------|-------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------|
| 581:<br>Kachemak, cool      | <br> <br>- Rolling Uplands                                                                | <br> <br>  Rangeland                | <br> <br> R170XD427AK       |
|                             | <br> Mountain Slopes                                                                      | <br>  Rangeland                     | <br> R170XY103AK            |
| 582:<br>Kachemak, cool      | <br> <br>- Rolling Uplands<br>                                                            | <br> <br>  Rangeland<br>            | <br> <br> R170XD427AK<br>   |
|                             | Mountain Slopes                                                                           | Rangeland<br>                       | R170XY103AK                 |
| 583:<br>Kachemak, forested  | │<br>- Picea ×lutzii/Salix barclayi-<br>│ Empetrum nigrum/Equisetum<br>│ arvense          | <br>  Forestland<br> <br> <br>      | <br> F170XD429AK<br> <br>   |
| 584:<br>Kachemak, forested  | <br>- Picea ×lutzii/Salix barclayi-<br>  Empetrum nigrum/Equisetum<br>  arvense           | <br>  Forestland<br> <br>           | <br> F170XD429AK<br> <br>   |
| 585:<br>Kachemak, forested  | <br>- Picea ×lutzii/Salix barclayi-<br>  Empetrum nigrum/Equisetum<br>  arvense           | <br>  Forestland<br>                | <br> F170XD429AK<br>        |
| 586:<br>Kachemak, cool      | <br>- Rolling Uplands                                                                     | <br>  Rangeland                     | <br> R170XD427AK            |
| Snowdance                   | <br>- Mountain Slopes, Drainages                                                          | <br>  Rangeland                     | <br> R170XY106AK            |
| 587:<br>Kachemak, cool      | - Rolling Uplands                                                                         | <br> <br>  Rangeland                | <br> <br> R170XD427AK       |
| Snowdance                   | <br>- Mountain Slopes, Drainages                                                          | <br>  Rangeland                     | <br> R170XY106AK            |
| 588:<br>Kachemak, cool      | <br> -<br> Rolling Uplands                                                                | <br> <br>  Rangeland                | <br> <br> R170XD427AK       |
| Snowdance                   | <br>- Mountain Slopes, Drainages                                                          | <br>  Rangeland                     | <br> R170XY106AK            |
| 589:<br>Kalifonsky          | <br> -<br> Picea mariana/Empetrum<br>  B nigrum-etula nana                                | <br> <br>  Forestland<br>           | <br>                        |
| 590:<br>Kalifonsky          | <br>- Picea mariana/Empetrum<br>  nigrum-Betula nana<br>                                  | <br>  Forestland<br>                | <br> F170XY412AK<br>        |
| 591:<br>Kalifonsky          | <br>- Picea mariana/Empetrum<br>  nigrum-Betula nana                                      | <br>  Forestland<br>                | <br> F170XY412AK<br>        |
| Typic Cryorthents           | <br>- Alpine Ridges                                                                       | <br>  Rangeland                     | <br> R169XY101AK            |
| 592:<br>Karluk              | - Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica         | <br>  Forestland<br> <br>           | <br> F170XC447AK<br>        |
| 593:<br>Kashwitna           | <br>- Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus<br> | <br> <br>  Forestland<br> <br> <br> | <br> F170XY435AK<br> <br>   |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name         | Ecological<br>  site name                                                                  | Ecological<br>  site type<br>  | Ecological<br>  site ID   |
|-------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|---------------------------|
| 594:<br>Kashwitna                   | <br> -<br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus | <br> <br>  Forestland<br> <br> | <br>                      |
| 595:<br>Kashwitna                   | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br> <br>  Forestland<br> <br> | <br> F170XY435AK<br>      |
| 596:<br>Kashwitna, moderately steep | <br> <br> none assigned                                                                    |                                |                           |
| Kashwitna, strongly sloping         | <br> none assigned<br>                                                                     | <br>                           |                           |
| 597:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br>  Forestland<br>           | <br> F170XC447AK<br> <br> |
| 598:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br>  Forestland<br>           | <br> F170XC447AK<br>      |
| 599:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>      |
| 600:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>      |
| 601:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>      |
| 602:<br>Kenai, moderately steep     | <br> <br> none assigned                                                                    | <br> <br>                      |                           |
| Kenai, gently sloping               | <br> none assigned<br>                                                                     | <br> <br>                      |                           |
| 603:<br>Kenai                       | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br>  Forestland<br>           | <br> F170XC447AK<br>      |
| Starichkof                          | <br> Wetland Complex                                                                       | <br>  Rangeland                | <br> R170XY400AK          |
| 604:<br>Kichatna                    | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis      | <br> <br>  Forestland<br> <br> | <br> F170XY009AK<br> <br> |
| 605:<br>Kichatna                    | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis      | <br>  Forestland<br> <br> <br> | <br> F170XY009AK<br>      |
|                                     | •                                                                                          | •                              | •                         |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name | Ecological<br>  site name<br>                                                                         | Ecological<br>  site type<br>  | Ecological<br>  site ID<br>_   |
|-----------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| 606:<br>Kichatna            | <br> <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis            | <br> <br>  Forestland<br> <br> | <br> <br> F170XY009AK<br> <br> |
| 607:<br>Kichatna            | <br>  Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis                | <br> <br>  Forestland<br> <br> | <br> F170XY009AK<br>           |
| 608:<br>Kichatna            | <br>  Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis                | <br> <br>  Forestland<br> <br> | <br> F170XY009AK<br>           |
| 609:<br>Kichatna            | <br>  Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis                | <br>  Forestland<br> <br>      | <br> F170XY009AK<br> <br>      |
| Killey                      | <br> Willow - Grass (Riparian)<br>                                                                    | <br> Rangeland<br>             | <br> R170XY408AK<br>           |
| 610:<br>Kidazqeni           | <br>  Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br> <br>      | <br> F170XY004AK<br> <br>      |
| 611:<br>Killey              | <br>  Willow - Grass (Riparian)                                                                       | <br> <br>  Rangeland           | <br> R170XY408AK               |
| Moose River                 | <br> Willow - Grass (Riparian)<br>                                                                    | <br>  Rangeland<br>            | <br> R170XY408AK<br>           |
| 612:<br>Liten               | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis                 | <br>  Forestland<br>           | <br> F170XY009AK<br>           |
| 613:<br>Lithic Haplocryands | <br> <br> none assigned                                                                               |                                |                                |
| Alic Haplocryands           | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense              | <br>  Forestland<br>           | <br> F170XD443AK<br> <br>      |
| Rock outcrop                | none assigned                                                                                         |                                |                                |
| 614:<br>Lithic Haplocryands | <br> <br> none assigned                                                                               |                                |                                |
| Alic Haplocryands           | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense              | <br>  Forestland<br>           | <br> F170XD443AK<br> <br>      |
| Rock outcrop                | <br> none assigned<br>                                                                                |                                |                                |
| 615:<br>Longmare            | <br>  Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis                | <br>  Forestland<br> <br> <br> | <br> F170XY009AK<br> <br>      |

Table 16. Ecological Site-Soils Correlation--Continued

| Man aymbal                  | L Foologies!                                                                             | Englacies!                     | Englagical                     |
|-----------------------------|------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| Map symbol<br>and soil name | Ecological<br>  site name                                                                | Ecological<br>  site type      | Ecological<br>  site ID        |
|                             |                                                                                          |                                |                                |
| 616:<br>Longmare            | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis    | <br>  Forestland<br>           | <br> F170XY009AK<br> <br>      |
| 617:<br>Mutnala             | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | <br> <br>  Forestland<br> <br> | <br> <br> F170XD443AK<br> <br> |
| 618:<br>Mutnala             | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | <br> <br>  Forestland<br> <br> | <br> F170XD443AK<br>           |
| 619:<br>Mutnala             | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense | <br>  Forestland<br>           | <br> F170XD443AK<br>           |
| 620:<br>Mutnala             | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | <br>  Forestland<br>           | <br> F170XD443AK<br>           |
| 621:<br>Mutnala             | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | <br>  Forestland<br> <br>      | <br> F170XD443AK<br>           |
| 622:<br>Mutnala             | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense | <br> <br>  Forestland<br> <br> | <br> F170XD443AK<br>           |
| 623:<br>Mutnala             | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | <br> <br>  Forestland<br> <br> | <br> <br> F170XD443AK<br> <br> |
| Starichkof                  | <br> Wetland Complex                                                                     | <br>  Rangeland                | <br> R170XY400AK               |
| Slikok                      | <br> Picea mariana/Empetrum<br>  nigrum-Betula nana                                      | <br>  Forestland<br>           | <br> F170XY412AK<br>           |
| 624:<br>Naptowne            | Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica          | <br>  Forestland<br>           | <br> F170XC447AK<br>           |
| 625:<br>Naptowne            | Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica          | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>           |
| 626:<br>Naptowne            | Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica          | <br> <br>  Forestland<br> <br> | <br> F170XC447AK<br>           |
| 627:<br>Naptowne            | <br>  Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica    | <br>  Forestland<br> <br>      | <br> F170XC447AK<br>           |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol                       | Ecological                     | Ecological        | Ecological       |
|----------------------------------|--------------------------------|-------------------|------------------|
| and soil name                    | site name                      | site type         | site ID<br>      |
| 628:                             |                                |                   | <br>             |
| Naptowne                         |                                | Forestland        | F170XC447AK      |
|                                  | papyrifera/Gymnocarpium        |                   | ļ                |
|                                  | dryopteris-Cornus suecica      |                   | ļ<br>ī           |
| 629:                             |                                |                   | İ                |
| Naptowne                         |                                | Forestland        | F170XC447AK      |
|                                  | papyrifera/Gymnocarpium        |                   | ļ                |
|                                  | dryopteris-Cornus suecica      |                   | İ                |
| 630:                             |                                |                   | İ                |
| Naptowne, moderately steep       | none assigned                  |                   | ļ                |
| Naptowne, strongly sloping       | <br> none assigned             | <br>              | <br>             |
| reaptowne, strongly sloping      |                                |                   | İ                |
| 631:                             | <u> </u>                       |                   | į                |
| Naptowne, strongly sloping       | none assigned<br>              | <del></del>       | <br>             |
| Naptowne, gently sloping         | ।<br> none assigned            |                   |                  |
|                                  | ]                              |                   | į                |
| 632:<br>Niklason                 | <br> Betula papyrifera-Picea   | <br>  Forestland  | <br> F170XY004AK |
| Nikiason                         | glauca/Alnus-Oplopanax         | 1 Orestiana<br>   | 170X1004AR       |
|                                  | horridus/Calamagrostis         |                   | i                |
|                                  | canadensis                     |                   | İ                |
| 000                              |                                |                   | ļ                |
| 633:<br>Nikolaevsk               | <br> Mountain Slones Drainages | <br>  Rangeland   | <br> R170XY106AK |
| Timolacych                       | <br>                           | Trangolana        |                  |
| 634:<br>Nikolaevsk               | <br> Mauntain Clance Draineges | <br>  Dangaland   | <br> D170VV106AV |
| Nikolaevsk                       | Mountain Slopes, Drainages<br> | Rangeland<br>     | R170XY106AK<br>  |
| 635:                             | İ                              | İ                 | j                |
| Nikolaevsk                       | Mountain Slopes, Drainages     | Rangeland         | R170XY106AK      |
| 636:                             | <br>                           |                   | i                |
| Nikolai                          |                                | Forestland        | F170XD414AK      |
|                                  | canadensis                     |                   |                  |
| 637:                             | <br>                           |                   | İ                |
| Nikolai, somewhat poorly drained | Picea ×lutzii/Calamagrostis    | Forestland        | F170XD414AK      |
|                                  | canadensis                     |                   |                  |
| Tuxedni                          | l<br> Bolling Uplands          | l<br>l Rangeland  | <br> R170XD427AK |
|                                  |                                |                   |                  |
| 638:                             |                                |                   |                  |
| Puntilla                         | Loamy Slopes<br>               | Rangeland         | R170XY201AK      |
| 639:                             |                                |                   | İ                |
| Puntilla                         | Loamy Slopes                   | Rangeland         | R170XY201AK      |
| 640:                             | 1                              | İ                 | <br>             |
| Qutal                            | ।<br> Picea glauca-Betula      | ।<br>  Forestland | <br> F170XY018AK |
|                                  | papyrifera/Menziesia           |                   |                  |
|                                  | ferruginea/Gymnocarpium        | İ                 | İ                |
|                                  | dryopteris                     |                   |                  |
| 641:                             | ]<br>                          |                   | <br>             |
|                                  | ।<br> Picea glauca-Betula      | <br>  Forestland  | <br> F170XY018AK |
|                                  | papyrifera/Menziesia           | İ                 | İ                |
|                                  | ferruginea/Gymnocarpium        |                   | [                |
|                                  | dryopteris                     |                   |                  |
|                                  | I                              | l                 | I                |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name    | Ecological<br>  site name                                                                       | Ecological<br>  site type<br>  | Ecological<br>  site ID             |
|--------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------|
| 642:<br>Qutal                  | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br> <br>  Forestland<br> <br> | <br> <br> F170XY018AK<br> <br> <br> |
| 643:<br>Redoubt, terraces      | <br> Populus balsamifera/Oplopanax<br>  horridus                                                | <br> <br>  Forestland<br> <br> | <br> F170XY445AK<br>                |
| 644:<br>Redoubt                | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense        | <br>  Forestland<br> <br>      | <br> F170XD443AK<br> <br>           |
| 645:<br>Redoubt                | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense        | <br>  Forestland<br> <br>      | <br> F170XD443AK<br> <br>           |
| 646:<br>Redoubt, cool          | <br> Rolling Uplands<br>                                                                        | <br>  Rangeland<br>            | <br> R170XD427AK<br>                |
| 647: Redoubt, moderately steep | <br> none assigned                                                                              | <br>                           |                                     |
| Redoubt, gently sloping        | ।<br>·∣none assigned<br>I                                                                       | <br> <br>                      |                                     |
| 648:<br>Redoubt, cool          | <br> Rolling Uplands                                                                            | <br>  Rangeland                | R170XD427AK                         |
| Tuxedni                        | <br> Rolling Uplands                                                                            | <br>  Rangeland                | <br> R170XD427AK                    |
| 649:<br>Riverwash              | <br> -<br> none assigned<br>                                                                    | <br> <br>                      |                                     |
| 650:<br>Salamatof              | <br> Wetland Complex                                                                            | <br>  Rangeland                | R170XY400AK                         |
| Doroshin                       | <br> Wetland Complex                                                                            | <br>  Rangeland                | <br> R170XY400AK                    |
| 651:<br>Salamatof              | <br> -<br> Wetland Complex                                                                      | <br> <br>  Rangeland<br>       | <br>                                |
| 652:<br>Slikok                 | <br> Picea mariana/Empetrum<br> B nigrum-etula nana                                             | <br>  Forestland<br>           | <br> F170XY412AK<br>                |
| 653:<br>Slikok                 | <br> Picea mariana/Empetrum<br>  nigrum-Betula nana                                             | <br> <br>  Forestland<br>      | <br> F170XY412AK<br>                |
| 654:<br>Smithfha               | <br> Populus balsamifera/Oplopanax<br>  horridus                                                | <br> <br>  Forestland<br>      | <br> F170XY445AK<br>                |
| 655:<br>Smithfha               | <br> Populus balsamifera/Oplopanax<br>  horridus                                                | <br> <br>  Forestland<br>      | <br> <br> F170XY445AK<br>           |
| 656:<br>Smokey Bay             | <br> <br> Lower Bench Toe Slopes<br>                                                            | <br> <br>  Rangeland<br>       | <br> <br> R170XD424AK<br>           |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name        | Ecological<br>  site name<br>                                                            | Ecological<br>  site type | Ecological<br>  site ID<br>    |
|------------------------------------|------------------------------------------------------------------------------------------|---------------------------|--------------------------------|
| 657:<br>Smokey Bay                 | <br> <br> Lower Bench Toe Slopes<br>                                                     | <br> <br>  Rangeland      | <br> <br> R170XD424AK<br>      |
| 658:<br>Snowdance                  | <br> <br> Mountain Slopes, Drainages<br>                                                 | Rangeland                 | <br> R170XY106AK<br>           |
| 659:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> F170XC447AK<br> <br>      |
| 660:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> F170XC447AK<br> <br>      |
| 661:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | Forestland                | <br> F170XC447AK<br> <br>      |
| 662:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | Forestland                | <br> <br> F170XC447AK<br> <br> |
| 663:<br>Soldotna, sandy substratum | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> <br> F170XC447AK<br> <br> |
| 664:<br>Soldotna, sandy substratum | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> <br> F170XC447AK<br> <br> |
| 665:<br>Soldotna, sandy substratum | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> <br> F170XC447AK<br> <br> |
| 666:<br>Soldotna, sandy substratum | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | Forestland                | <br> <br> F170XC447AK<br> <br> |
| 667:<br>Soldotna, strongly sloping | <br> <br> none assigned                                                                  |                           | <br>                           |
| Soldotna, gently sloping           | l<br> none assigned                                                                      |                           |                                |
| 668:<br>Soldotna, sandy substratum | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica     | <br>  Forestland<br>      | <br> <br> F170XC447AK<br> <br> |
| Kenai                              | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica<br> | Forestland<br>            | <br> F170XC447AK<br> <br> <br> |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name        | Ecological<br>  site name<br>                                                                   | Ecological<br>  site type<br>  | Ecological<br>  site ID<br>    |
|------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|
| 669:<br>Soldotna, sandy substratum | <br>                                                                                            | <br> <br>  Forestland<br>      | <br> <br> F170XC447AK<br> <br> |
| Kenai                              | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica            | <br>  Forestland<br>           | <br> F170XC447AK<br> <br>      |
| 670:<br>Soldotna                   | <br> <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica       | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| Kichatna                           | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis           | <br>  Forestland<br> <br>      | <br> F170XY009AK<br> <br>      |
| 671:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica            | <br> <br>  Forestland<br> <br> | <br> <br> F170XC447AK<br> <br> |
| Kichatna                           | <br> Picea-Betula papyrifera/Ledum-<br>  Vaccinium vitis-idaea/Cornus<br>  canadensis<br>       | <br>  Forestland<br> <br> <br> | <br> F170XY009AK<br> <br>      |
| 672:<br>Soldotna                   | <br> Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica            | <br>  Forestland<br>           | <br> F170XC447AK<br> <br>      |
| Nikolai                            | <br> Picea ×lutzii/Calamagrostis<br>  canadensis                                                | <br>  Forestland<br>           | <br> F170XD414AK<br>           |
| 673:<br>Spenard                    | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br>  Forestland<br> <br>      | <br> F170XY018AK<br> <br>      |
| 674:<br>Spenard                    | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br> <br>  Forestland<br> <br> | <br> F170XY018AK<br> <br>      |
| 675:<br>Spenard                    | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris | <br>  Forestland<br> <br> <br> | <br> F170XY018AK<br> <br>      |
| 676:<br>Starichkof                 | <br> <br> Wetland Complex                                                                       | <br> <br>  Rangeland           | <br> R170XY400AK               |
| Doroshin                           | <br> Wetland Complex<br>                                                                        | <br>  Rangeland<br>            | <br> R170XY400AK<br>           |
| 677:<br>Starichkof                 | <br> Wetland Complex<br>                                                                        | <br>  Rangeland<br>            | <br> R170XY400AK<br>           |
| 678:<br>Starichkof                 | <br> Wetland Complex<br>                                                                        | <br>  Rangeland<br>            | <br> R170XY400AK<br>           |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol<br>and soil name  | Ecological<br>site name                                                                               | Ecological<br>  site type<br> | Ecological<br>  site ID<br> |
|------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
| 679:<br>Starichkof, forested | <br> <br>- Picea mariana/Betula nana<br>                                                              | <br> <br>  Forestland         | <br> <br> F170XY444AK<br>   |
| 680:<br>Starichkof           | <br>- Wetland Complex                                                                                 | <br>  Rangeland               | <br> R170XY400AK            |
| Slikok                       | <br>- Picea mariana/Empetrum<br> B nigrum-etula nana                                                  | <br>  Forestland<br>          | <br> F170XY412AK<br>        |
| Naptowne                     | <br>- Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica                 | <br>  Forestland<br> <br>     | <br> F170XC447AK<br> <br>   |
| 681:<br>Starichkof           | <br> -<br> Wetland Complex                                                                            | <br>  Rangeland               | <br> R170XY400AK            |
| Spenard                      | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br>  dryopteris       | Forestland<br> <br>           | <br> F170XY018AK<br> <br>   |
| 682:<br>Susitna              | <br>- Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br>          | <br> F170XY004AK<br>        |
| Riverwash                    | <br>- none assigned<br>                                                                               |                               |                             |
| 683:<br>Susitna              | -<br> Betula papyrifera-Picea<br>  glauca/Alnus-Oplopanax<br>  horridus/Calamagrostis<br>  canadensis | <br>  Forestland<br>          | <br> F170XY004AK<br>        |
| 684:<br>Talkeetna            | <br> <br>- Loamy Slopes                                                                               | <br> <br>  Rangeland          | <br> <br> R170XY201AK       |
| 685:<br>Talkeetna            | - Loamy Slopes                                                                                        | <br>  Rangeland               | <br> R170XY201AK            |
| 686:<br>Talkeetna            | - Loamy Slopes                                                                                        | <br> <br>  Rangeland          | <br> R170XY201AK            |
| Starichkof                   | <br>- Wetland Complex                                                                                 | <br>  Rangeland               | <br> R170XY400AK            |
| 687:<br>Tangerra             | <br>- Picea glauca-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Cornus suecica                 | <br>  Forestland<br>          | <br> F170XC447AK<br>        |
| 688:<br>Beaches, tidal flats | <br> -<br> none assigned                                                                              |                               |                             |
| 689:<br>Tlikakila            | <br> <br>- Rolling Uplands<br>                                                                        | <br> <br> Rangeland           | <br> <br> R170XD427AK<br>   |
| 690:<br>Tlikakila            | <br> -<br> Rolling Uplands                                                                            | <br> <br>  Rangeland<br>      | <br> R170XD427AK<br>        |
| 691:<br>Tlikakila            | <br> -<br> Rolling Uplands<br>                                                                        | <br> <br> Rangeland<br>       | <br> R170XD427AK<br>        |

Table 16. Ecological Site-Soils Correlation--Continued

|                             | <del>,</del>                                                                             |                                     |                                     |  |
|-----------------------------|------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|--|
| Map symbol<br>and soil name | Ecological<br>  site name                                                                | Ecological<br>  site type           | Ecological<br>  site ID             |  |
| 692:                        |                                                                                          | <br> <br>                           |                                     |  |
| Tokositna                   | Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense      | Forestland<br> <br>                 | F170XD443AK<br> <br>                |  |
| 693:<br>Tokositna           | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense | <br> <br>  Forestland<br> <br>      | <br> <br> F170XD443AK<br> <br>      |  |
| 694:<br>Tokositna           | <br> Picea glauca-Betula<br>  papyrifera/Calamagrostis<br>  canadensis-Equisetum arvense | <br> <br>  Forestland<br> <br>      | <br> F170XD443AK<br>                |  |
| 695:<br>Truuli              | <br> Picea glauca-Betula<br>  papyrifera/Menziesia<br>  ferruginea/Gymnocarpium<br> <br> | <br> <br>  Forestland<br> <br> <br> | <br> <br> F170XY018AK<br> <br> <br> |  |
| 696:<br>Tutka               | <br> <br> none assigned                                                                  | <br>                                | <br>                                |  |
| Kasitsna                    | <br> none assigned                                                                       | <br>                                |                                     |  |
| Rock outcrop                | <br> none assigned                                                                       | <br>                                |                                     |  |
| 697:<br>Tutka               | <br> <br> none assigned                                                                  | <br> <br>                           |                                     |  |
| Portgraham                  | <br> none assigned                                                                       | <br>                                |                                     |  |
| 698:<br>Tuxedni             | <br> <br> Rolling Uplands                                                                | <br> <br>  Rangeland<br>            | <br> <br> R170XD427AK               |  |
| 699:<br>Tuxedni             | <br> -<br> Rolling Uplands<br>                                                           | <br> <br>  Rangeland<br>            | <br> <br> R170XD427AK               |  |
| 700:<br>Tuxedni, warm       | <br> Populus balsamifera/Oplopanax<br>  horridus                                         | <br> <br>  Forestland<br>           | <br> F170XY445AK<br>                |  |
| 701:<br>Typic Cryaquents    | <br> <br> none assigned<br>                                                              | <br> <br>                           | <br> <br>                           |  |
| 702:<br>Typic Cryopsamments | <br> -<br> Beach Dunes and Ridges<br>                                                    | <br> <br>  Rangeland<br>            | <br> R170XY050AK                    |  |
| 703:<br>Typic Cryorthents   | <br> -<br> Alpine Ridges<br> -                                                           | <br> <br>  Rangeland<br>            | <br> R169XY101AK                    |  |
| 704:<br>Urban land          | <br> -<br> none assigned<br>                                                             | <br> <br>                           |                                     |  |
| 705: Water, fresh           | ı<br> <br> none assigned<br>                                                             | <br> <br>                           |                                     |  |
| 706:<br>Whitsol             | <br> Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus<br> | <br> <br>  Forestland<br> <br>      | <br> <br> F170XY435AK<br> <br>      |  |

Table 16. Ecological Site-Soils Correlation--Continued

| Map symbol      | Ecological                                                                            | Ecological                | Ecological                |
|-----------------|---------------------------------------------------------------------------------------|---------------------------|---------------------------|
| and soil name   | site name                                                                             | site type                 | site ID                   |
| 707:<br>Whitsol | Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br>  Forestland<br>      | <br>                      |
| 708:<br>Whitsol | Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br>  Forestland<br>      | <br> F170XY435AK<br>      |
| 709:<br>Whitsol | Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br>  Forestland<br>      | <br> F170XY435AK<br> <br> |
| 710:<br>Whitsol | Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus       | <br>  Forestland<br>      | <br> F170XY435AK<br>      |
| 711: Whitsol    | <br>  Picea ×lutzii-Betula<br>  papyrifera/Gymnocarpium<br>  dryopteris-Rubus pedatus | <br>  Forestland<br> <br> | <br> F170XY435AK<br>      |
| Doroshin        | Wetland Complex                                                                       | <br>  Rangeland<br> <br>  | <br> R170XY400AK<br>      |

**Table 17. Forest Productivity** 

(Absence of an entry indicates that the data were not estimated.)

|                                     | Potential p            | roductivi             | ty                   | <br> <br>                      |
|-------------------------------------|------------------------|-----------------------|----------------------|--------------------------------|
| Map symbol and soil name            | Common trees           | <br>  Site<br>  index | Volume of wood fiber | Trees to manage                |
|                                     | <br> <br>              | <br> <br>             | Cu. Ft./Acre         | <br> <br>                      |
| 501:<br>Aquic Cryofluvents          | <br> <br>              |                       | <br> <br>            | <br>                           |
| 502:<br>Aquic Cryofluvents, shallow | <br> <br>              |                       |                      | <br>                           |
| 503:<br>Badland, sea cliffs         | <br> <br>              |                       |                      | <br>                           |
| 504:<br>Badland, sea cliffs         | <br> <br>              |                       |                      | <br>                           |
| Typic Cryorthents                   | -                      |                       |                      | <br>                           |
| 605:<br>Beaches                     | <br>                   | <br>                  |                      | <br> <br>                      |
| 506:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | 14                   | <br> -<br> paper birch, spruce |
| 507:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | 14                   | <br> <br> paper birch, spruce  |
| 608:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | 14                   | <br> <br> paper birch, spruce  |
| 509:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | <br> <br>  14        | <br> <br> paper birch, spruce  |
| Mutnala                             | <br> white spruce      | <br>  75              | 14                   | paper birch, spruce            |
| 510:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | <br> <br>  14        | <br> <br> paper birch, spruce  |
| Smokey Bay                          | <br>                   |                       |                      | <br>                           |
| 511:<br>Beluga                      | <br> <br> white spruce | <br> <br>  75         | <br> <br>  14        | <br> <br> paper birch, spruce  |
| Smokey Bay                          | <br>                   | <br>                  |                      | <br>                           |
| 512:<br>Benka                       | <br> <br> white spruce | <br> <br>  69         | <br> <br>  12        | <br> <br> paper birch, spruce  |
| 513:<br>Benka                       | <br> <br> white spruce | <br> <br>  69         | <br> <br>  12        | <br> <br> paper birch, spruce  |
| 514:<br>Benka                       | <br> <br> white spruce | <br> <br>  69         | <br> <br>  12        | <br> <br> paper birch, spruce  |
| i15:<br>Benka                       | <br> <br> white spruce | <br> <br>  69         | <br> <br>  12        | <br> <br> paper birch, spruce  |
| 516:<br>Benka                       | <br> <br> white spruce | <br> <br>  69         | <br> <br>  12        | <br> <br> paper birch, spruce  |

Table 17. Forest Productivity—Continued

|                                       | Potential p                | roductivit            | ty                   | <br> <br>                         |
|---------------------------------------|----------------------------|-----------------------|----------------------|-----------------------------------|
| Map symbol and soil name              | Common trees               | <br>  Site<br>  index | Volume of wood fiber | Trees to manage                   |
|                                       | <br>                       | j<br>I                | Cu. Ft./Acre         | <br>                              |
| 517: Benka, strongly sloping          | <br> white spruce          | <br>  69              | <br>  12             | <br> paper birch, spruce          |
| Benka, gently sloping                 | <br> white spruce          | 69                    | 12                   | <br> paper birch, spruce          |
| 518:<br>Boxcar                        | <br> <br> white spruce     | <br> <br>  54         | 7                    | <br> <br> spruce<br>              |
| 519:<br>Boxcar                        | <br> <br> white spruce     | <br> <br>  54         | <br> <br>  7         | <br> <br> spruce<br>              |
| 520:<br>Boxcar                        | <br> <br> white spruce<br> | <br> <br>  54         | <br> <br>  7         | <br> <br> spruce<br>              |
| 521:<br>Boxcar, cool                  | <br> <br>                  | <br>                  | <br> <br>            | <br> <br>                         |
| 522:<br>Boxcar, cool                  | <br>                       | <br> <br>             | <br> <br>            | <br>                              |
| 523:<br>Chenega                       | <br> <br>                  | <br>                  | <br>                 | <br>                              |
| 524:<br>Chenega, cool                 | <br> <br>                  | <br> <br>             | <br> <br>            | <br> <br>                         |
| 525:<br>Chenega, occasionally flooded | <br>                       | <br>                  |                      | <br>                              |
| 526:<br>Chulitna                      | <br> <br> white spruce     | <br> <br>  74         | <br> <br>  14        | <br> <br> paper birch, spruce     |
| 527:<br>Chulitna                      | <br> <br> white spruce<br> | <br> <br>  74         | <br> <br>  14        | <br> <br> paper birch, spruce<br> |
| 528:<br>Chulitna                      | <br> <br> white spruce<br> | <br> <br>  74         | <br> <br>  14        | <br> <br> paper birch, spruce<br> |
| 529:<br>Chulitna                      | <br> <br> white spruce     | <br> <br>  74         | <br> <br>  14        | <br> <br> paper birch, spruce     |
| 530:<br>Chunilna                      | <br> <br> white spruce     | <br> <br>  51         | <br> <br>  6         | <br> <br> spruce                  |
| 531:<br>Chunilna                      | <br> <br> white spruce     | <br> <br>  51         | 6                    | <br> <br> spruce                  |
| 532:<br>Chunilna, cool                | <br>                       | <br> <br>             |                      | <br>                              |
| 533:<br>Chunilna, cool                | <br>                       | <br> <br>             |                      | <br>                              |
| 534:<br>Clam Gulch                    | <br> <br> white spruce     | <br> <br>  59         | <br> <br>  8         | <br> <br> spruce                  |
| 535:<br>Clunie                        | <br>                       | <br> <br>             |                      | <br>                              |

Table 17. Forest Productivity—Continued

|                                     | Potential          | Potential productivity |                      |                                   |
|-------------------------------------|--------------------|------------------------|----------------------|-----------------------------------|
| Map symbol and soil name            | Common trees       | <br>  Site<br>  index  | Volume of wood fiber | Trees to manage                   |
|                                     |                    |                        | Cu. Ft./Acre         |                                   |
| 536:<br>Coal Creek                  | <br>white spruce   | 59                     | 8                    | <br> <br> paper birch, spruce     |
| 537:<br>Coal Creek                  | <br>white spruce   | 59                     | 8                    | <br> <br> paper birch, spruce     |
| 538:<br>Coal Creek                  | white spruce       | <br> <br>  59          | 8                    | <br> <br> paper birch, spruce     |
| 539:<br>Cohoe                       | <br>white spruce   | <br>  66               | 11                   | <br> <br> paper birch, spruce     |
| 540:<br>Cohoe                       | white spruce       | 66                     | 11                   | <br> <br> paper birch, spruce     |
| 541:<br>Cohoe                       | white spruce       | <br>  66               | 11                   | <br> <br> paper birch, spruce<br> |
| 542:<br>Cohoe                       | white spruce       | <br>  66               | 11                   | <br> <br> paper birch, spruce     |
| 543:<br>Cohoe                       | <br>white spruce   | 66                     | 11                   | <br> paper birch, spruce          |
| 544:<br>Cohoe                       | white spruce       | 66                     | 11                   | <br> <br> paper birch, spruce     |
| 545:<br>Cohoe, dry                  | white spruce       | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 546:<br>Cohoe, dry                  | white spruce       | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 547:<br>Cohoe, dry                  | white spruce       | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 548:<br>Cohoe, dry                  | white spruce       | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 549:<br>Cohoe, dry                  | white spruce       | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 550:<br>Cohoe, dry                  | <br>  white spruce | <br> <br>  69          | 12                   | <br> <br> paper birch, spruce     |
| 551:<br>Cohoe, moderately steep     |                    |                        |                      | <br> <br> paper birch, spruce     |
| Cohoe, gently sloping               |                    | <br>                   |                      | paper birch, spruce               |
| 552:<br>Cohoe, dry, moderately stee | <br> <br> p        |                        |                      | <br> <br> paper birch, spruce     |
| Cohoe, dry, gently sloping          | İ                  | ĺ                      | -                    | paper birch, spruce               |

Table 17. Forest Productivity—Continued

| Potential pro              | oductivity                                                                                                                                                                                                                                        | ′                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Common trees               | Site  <br>index                                                                                                                                                                                                                                   | Volume of wood fiber                                                                                                                                                                                                                                                                                                            | Trees to manage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| -<br> <br>                 | <br>                                                                                                                                                                                                                                              | Cu. Ft./Acre                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <br>                       | 69 l                                                                                                                                                                                                                                              | 12                                                                                                                                                                                                                                                                                                                              | <br> <br> paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| i                          | 64                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                 | paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                            | İ                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| white spruce               | 69                                                                                                                                                                                                                                                | 12                                                                                                                                                                                                                                                                                                                              | paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| white spruce               | 64                                                                                                                                                                                                                                                | 10                                                                                                                                                                                                                                                                                                                              | paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| white spruce               | 69                                                                                                                                                                                                                                                | 12                                                                                                                                                                                                                                                                                                                              | paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| white spruce               | 55                                                                                                                                                                                                                                                | 7                                                                                                                                                                                                                                                                                                                               | l<br> spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <br> <br> white spruce<br> | 69                                                                                                                                                                                                                                                | 12                                                                                                                                                                                                                                                                                                                              | <br> <br> paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| white spruce               | 55                                                                                                                                                                                                                                                | 7                                                                                                                                                                                                                                                                                                                               | spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <br> <br> white spruce<br> | 29                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                               | <br> <br> black spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <br> <br> white spruce<br> | 29                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                               | <br> <br> black spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                            | <br>                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                 | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| white spruce               | 66                                                                                                                                                                                                                                                | 12                                                                                                                                                                                                                                                                                                                              | paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                            |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                 | <br> <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <br> <br> white spruce<br> | 64                                                                                                                                                                                                                                                | 10                                                                                                                                                                                                                                                                                                                              | <br> <br> paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <br> <br>  white spruce    | 64                                                                                                                                                                                                                                                | 10                                                                                                                                                                                                                                                                                                                              | <br> <br> paper birch, spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <br> <br> white spruce<br> | 64  <br>                                                                                                                                                                                                                                          | 10                                                                                                                                                                                                                                                                                                                              | <br> <br> paper birch, spruce<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                            | white spruce white spruce 29 white spruce 29 white spruce 29 white spruce 29 white spruce 66 white spruce 66 white spruce 66 white spruce 66 white spruce 66 white spruce 66 white spruce 66 white spruce 66 white spruce 64 | index   wood fiber   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre   Cu. Ft./Acre |

Table 17. Forest Productivity—Continued

|                            | Potential p                | roductivi             | ty                   | <u> </u>                          |  |
|----------------------------|----------------------------|-----------------------|----------------------|-----------------------------------|--|
| Map symbol and soil name   | Common trees               | <br>  Site<br>  index | Volume of wood fiber | Trees to manage                   |  |
|                            |                            | <br>                  | Cu. Ft./Acre         |                                   |  |
| 567:<br>Iliamna, cool      | <br> <br>                  | <br> <br>             |                      | <br> <br>                         |  |
| 568:<br>Island             | <br>                       | <br> <br>             |                      | <br>                              |  |
| 569:<br>Island             | <br> <br>                  | <br> <br>             |                      | <br> <br>                         |  |
| 570:<br>Island             | <br>                       | <br>                  |                      | <br> <br>                         |  |
| 571:<br>Island             | <br>                       | <br>                  |                      | <br>                              |  |
| 572:<br>Island, forested   | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br> <br> paper birch, spruce<br> |  |
| 573:<br>Kachemak           | <br> <br> white spruce<br> | <br> <br>  67         | 11                   | <br> <br>                         |  |
| 574:<br>Kachemak           | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br>                              |  |
| 575:<br>Kachemak           | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br> <br>                         |  |
| 576:<br>Kachemak           | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br> <br>                         |  |
| 577:<br>Kachemak           | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br>                              |  |
| 578:<br>Kachemak, cool     | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br> <br>                         |  |
| 579:<br>Kachemak, cool     | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br>                              |  |
| 580:<br>Kachemak, cool     | <br> <br> white spruce     | <br> <br>  67         | 11                   | <br>                              |  |
| 581:<br>Kachemak, cool     | <br>                       | <br> <br>  67         | 11                   | <br>                              |  |
| 582:<br>Kachemak, cool     | <br>                       | <br> <br>  67         | 11                   | <br>                              |  |
| 583:<br>Kachemak, forested | <br> <br> white spruce     | <br> <br>  72         | 13                   | <br> <br> paper birch, spruce     |  |
| 584:<br>Kachemak, forested | <br> <br> white spruce     | <br> <br>  72         |                      | <br> <br> paper birch, spruce     |  |
| 585:<br>Kachemak, forested |                            | <br> <br>  72         | 13                   | <br> <br> paper birch, spruce     |  |

Table 17. Forest Productivity—Continued

Potential productivity Map symbol and soil name Common trees Site Volume of Trees to manage wood fiber index Cu. Ft./Acre 586: Kachemak, cool------ white spruce 67 11 Snowdance -----Kachemak, cool------|white spruce 67 11 Snowdance -----588: Kachemak, cool------|white spruce 67 11 Kalifonsky ------ white spruce 7 55 black spruce, spruce 590: Kalifonsky ------|white spruce 55 black spruce, spruce Kalifonsky ------|white spruce 55 7 black spruce, spruce Typic Cryorthents-----592: Karluk-----593: Kashwitna -----|white spruce 67 paper birch, spruce 11 594: Kashwitna white spruce 67 11 paper birch, spruce 595: white spruce 67 paper birch, spruce Kashwitna -----11 596: Kashwitna, moderately steep --Kashwitna, strongly sloping----597: Kenai----white spruce 64 10 paper birch, spruce 598: 64 Kenai-10 white spruce paper birch, spruce Kenai----white spruce 64 10 paper birch, spruce 600: 10 Kenai-white spruce 64 paper birch, spruce 601: white spruce 64 10 paper birch, spruce

Table 17. Forest Productivity—Continued

|                                 | Potential              | Potential productivity |                      |                               |  |  |
|---------------------------------|------------------------|------------------------|----------------------|-------------------------------|--|--|
| Map symbol and soil name        | Common trees           | <br>  Site<br>  index  | Volume of wood fiber | Trees to manage               |  |  |
|                                 |                        | -                      | Cu. Ft./Acre         |                               |  |  |
| 602:<br>Kenai, moderately steep |                        |                        |                      | <br>                          |  |  |
| Kenai, gently sloping           |                        |                        |                      | <br>                          |  |  |
| 603:<br>Kenai                   | white spruce           | <br> <br>  64          | 10                   | <br> <br> paper birch, spruce |  |  |
| Starichkof                      |                        |                        |                      |                               |  |  |
| 604:<br>Kichatna                | white spruce           | <br> <br>  61          | 8                    | <br> <br> spruce              |  |  |
| 605:<br>Kichatna                | white spruce           | 61                     | 8                    | <br> <br> spruce              |  |  |
| 606:<br>Kichatna                | white spruce           | <br> <br>  61          | <br> <br>  8         | <br> <br> spruce<br>          |  |  |
| 607:<br>Kichatna                | white spruce           | 61                     | 8                    | <br> <br> spruce<br>          |  |  |
| 608:<br>Kichatna                | white spruce           | 61                     | 8                    | <br> <br> spruce              |  |  |
| 609:<br>Kichatna                | white spruce           | 61                     | 8                    | <br> <br> spruce<br>          |  |  |
| Killey                          |                        |                        |                      |                               |  |  |
| 610:<br>Kidazqeni               |                        |                        |                      | <br> <br>                     |  |  |
| 611:<br>Killey                  |                        |                        |                      | <br>                          |  |  |
| Moose River                     |                        |                        |                      | <br>                          |  |  |
| 612:<br>Liten                   | white spruce           | <br> <br>  72          | 13                   | <br> <br> paper birch, spruce |  |  |
| 613:<br>Lithic Haplocryands     |                        |                        |                      | <br> <br>                     |  |  |
| Alic Haplocryands               |                        |                        |                      | <br>                          |  |  |
| Rock outcrop                    |                        |                        |                      | <br>                          |  |  |
| 614:<br>Lithic Haplocryands     |                        |                        |                      | <br> <br>                     |  |  |
| Alic Haplocryands               |                        |                        |                      | <br> <br>                     |  |  |
| Rock outcrop                    |                        |                        |                      | <br>                          |  |  |
| 615:<br>Longmare                | <br> <br> white spruce | <br> <br>  84          | <br> <br>  17        | <br> <br> paper birch, spruce |  |  |

Table 17. Forest Productivity—Continued

Potential productivity Map symbol and soil name Common trees Site Volume of Trees to manage wood fiber index Cu. Ft./Acre 616: Longmare------white spruce 84 17 paper birch, spruce Mutnala-----75 white spruce 14 paper birch, spruce 618: Mutnala----- white spruce 75 14 paper birch, spruce Mutnala------|white spruce 75 paper birch, spruce 14 620: Mutnala----- white spruce 75 paper birch, spruce 14 621: Mutnala------|white spruce 75 paper birch, spruce 14 622: Mutnala----- white spruce 75 paper birch, spruce 14 Mutnala------|white spruce 75 paper birch, spruce 14 Starichkof-----Slikok ------624: white spruce paper birch, spruce Naptowne-68 11 625: - white spruce 68 paper birch, spruce Naptowne-----11 626: Naptowne--68 paper birch, spruce white spruce 11 68 11 paper birch, spruce 628: Naptownewhite spruce 68 11 paper birch, spruce 629: Naptowne----white spruce 68 11 paper birch, spruce Naptowne, moderately steep-----Naptowne, strongly sloping----------Naptowne, strongly sloping------------Naptowne, gently sloping -

Table 17. Forest Productivity—Continued

| Map symbol and soil name         Common trees         Site index         Volume of wood fiber         Trees to mana           632:         Cu. Ft./Acre         Cu. Ft./Acre         632:         Cu. Ft./Acre         Cu. Ft./Acre         66         11         paper birch, spr         633:         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre         Cu. Ft./Acre <th></th> |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 632: Niklason                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ruce |
| Niklason                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ruce |
| Nikolaevsk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |
| Nikolaevsk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |
| Nikolaevsk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |
| Nikolai white spruce 55 7 spruce 637: Nikolai, somewhat poorly drained   spruce  Tuxedni white spruce 68 11 paper birch, spr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |
| Nikolai, somewhat poorly drained     spruce  Tuxedni   white spruce   68   11   paper birch, spruce   638:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |
| 638:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ruce |
| Puntilla white spruce   58   8  spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |
| 639:<br>Puntilla white spruce   58   8   spruce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |
| 640:<br>Qutal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |
| 641:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |
| 642:<br>Qutal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |
| 643:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ruce |
| 644:  Redoubtwhite spruce   64   10   paper birch, spr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ruce |
| 645:  Redoubtwhite spruce 64 10 paper birch, spr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ruce |
| 646:<br>Redoubt, cool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |
| 647:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |
| Redoubt, gently sloping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |
| 648:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |
| Tuxedni  white spruce   68   11   paper birch, spr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |

Table 17. Forest Productivity—Continued

Potential productivity Map symbol and soil name Common trees Site Volume of Trees to manage wood fiber index Cu. Ft./Acre 649: Riverwash -----Salamatof-----i Doroshin ----- white spruce 29 black spruce 1 651: 652: Slikok ------653: Slikok -----654: 655: Smithfha -----656: Smokey Bay -----657: Smokey Bay -----658: Snowdance -----659: Soldotna white spruce 66 12 paper birch, spruce 660: white spruce 12 paper birch, spruce Soldotna --66 661: Soldotna white spruce 66 12 paper birch, spruce 662: 66 paper birch, spruce Soldotna white spruce 12 Soldotna, sandy substratum----white spruce 66 12 paper birch, spruce 664: Soldotna, sandy substratum-----|white spruce 66 12 paper birch, spruce 665: paper birch, spruce Soldotna, sandy substratum------ white spruce 66 12 Soldotna, sandy substratum----- white spruce 66 12 paper birch, spruce

Table 17. Forest Productivity—Continued

Potential productivity Map symbol and soil name Common trees Site Volume of Trees to manage index wood fiber Cu. Ft./Acre 667: Soldotna, strongly sloping------ white spruce 66 12 paper birch, spruce Soldotna, gently sloping ------|white spruce 66 paper birch, spruce 12 668: Soldotna, sandy substratum-----|white spruce 66 paper birch, spruce 12 10 Kenai------|white spruce 64 paper birch, spruce 669: Soldotna, sandy substratum------|white spruce 66 12 paper birch, spruce Kenai------white spruce 64 10 paper birch, spruce Soldotna ----- white spruce 66 12 paper birch, spruce Kichatna----white spruce 61 8 spruce 671: paper birch, spruce Soldotna -- white spruce 66 12 white spruce Kichatna-61 8 spruce 672: Soldotna ----- white spruce 66 12 paper birch, spruce Nikolai ----- white spruce 55 7 spruce 673: Spenard ----- white spruce 66 12 paper birch, spruce Spenard ----- white spruce 66 12 paper birch, spruce 675: Spenard ----- white spruce 66 12 paper birch, spruce Starichkof-----Doroshin -white spruce 29 1 black spruce Starichkof-678: Starichkof-679: Starichkof, forested ---white spruce 51 6 black spruce, white spruce

Table 17. Forest Productivity—Continued

Potential productivity Map symbol and soil name Common trees Site Volume of Trees to manage wood fiber index Cu. Ft./Acre 680: Slikok ------Naptowne-----|white spruce 68 11 paper birch, spruce 681: Starichkof-----Spenard ----- white spruce 66 paper birch, spruce 12 682: Susitna -----Riverwash -----Susitna ----- |---684: Talkeetna ------ white spruce 65 10 paper birch, spruce 685: Talkeetna ----- white spruce 65 10 paper birch, spruce 686: Talkeetna ------ white spruce paper birch, spruce 65 10 Starichkof-----687: Tangerra -----688: Beaches, tidal flats-----Tlikakila ----white spruce 45 5 black spruce, white spruce 690: Tlikakila --white spruce 45 5 black spruce, white spruce 691: Tlikakila -----45 5 black spruce, white spruce 692: Tokositna -----86 white spruce 18 paper birch, spruce 693: Tokositna -----86 18 paper birch, spruce 694: Tokositna ----white spruce 86 18 paper birch, spruce 695: Truuli------|white spruce 55 7 paper birch, spruce

Table 17. Forest Productivity—Continued

|                             | Potential p              | roductivi             | ty                   | <br>                          |  |
|-----------------------------|--------------------------|-----------------------|----------------------|-------------------------------|--|
| Map symbol and soil name    | Common trees             | <br>  Site<br>  index | Volume of wood fiber | Trees to manage               |  |
|                             | -                        | <br> <br>             | Cu. Ft./Acre         |                               |  |
| 696:<br>Tutka               | <br>                     | <br>                  |                      | <br>                          |  |
| Kasitsna                    | <br>                     |                       |                      | <br>                          |  |
| Rock outcrop                | <br>                     |                       |                      | <br>                          |  |
| 697:<br>Tutka               | <br> <br>                | <br> <br>             |                      | <br>                          |  |
| Portgraham                  | <br>                     |                       |                      | <br>                          |  |
| 698:<br>Tuxedni             | │<br>│<br>· white spruce | <br> <br>  68         | 11                   | <br> <br> paper birch, spruce |  |
| 699:<br>Tuxedni             | <br> <br> white spruce   | <br> <br>  68         | 11                   | <br> <br> paper birch, spruce |  |
| 700:<br>Tuxedni, warm       | <br> <br> white spruce   | <br> <br>  65         | 10                   | <br> <br> spruce              |  |
| 701:<br>Typic Cryaquents    | <br> <br>                | <br> <br>             |                      | <br>                          |  |
| 702:<br>Typic Cryopsamments | <br> <br>                | <br> <br>             |                      | <br>                          |  |
| 703:<br>Typic Cryorthents   | <br> <br>                | <br>                  |                      | <br>                          |  |
| 704:<br>Urban land          | <br> <br>                | <br>                  |                      | <br>                          |  |
| 705:<br>Water, fresh        | <br> <br>                | <br>                  |                      | <br>                          |  |
| 706:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | 9                    | <br> <br> paper birch, spruce |  |
| 707:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | 9                    | <br> <br> paper birch, spruce |  |
| 708:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | 9                    | <br> <br> paper birch, spruce |  |
| 709:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | <br> <br>  9         | <br> <br> paper birch, spruce |  |
| 710:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | <br> <br>  9         | <br> <br> paper birch, spruce |  |
| 711:<br>Whitsol             | <br> <br> white spruce   | <br> <br>  62         | <br> <br>  9         | <br> <br> paper birch, spruce |  |
| Doroshin                    | <br> white spruce        | 29                    | 1                    | <br> black spruce             |  |

## **Table 18. Building Site Development: Structures**

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name         |                             |                                                                   | Dwellings with baseme (Standard criteria) | nts                                                                         | Small commercial buildings<br>  (Standard criteria) |                                                                   |                              |
|----------------------------------|-----------------------------|-------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------|------------------------------|
|                                  | map<br> unit<br> <br>       | Rating class and limiting features                                | Value<br> <br>                            | Rating class and limiting features                                          | Value<br> <br>                                      | Rating class and limiting features                                | Value<br> <br>               |
| 501:<br>Aquic Cryofluvents       | <br> <br>  85<br> <br>      | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone | 1.00                                      | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone           | <br> <br> <br> 1.00<br> 1.00                        | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone | <br> <br> <br> 1.00<br> 0.05 |
| 502: Aquic Cryofluvents, shallow | <br> <br>  80<br> <br>      | <br>                                                              | <br> <br> <br> 1.00<br> 0.05              | <br>                                                                        | <br> <br> <br> 1.00<br> 1.00                        | <br>                                                              | <br> <br> <br> 1.00<br> 0.05 |
| 503:<br>Badland, sea cliffs      | <br> 100                    | <br> <br> Not rated<br>                                           | <br> <br>                                 | <br> <br> Not rated<br>                                                     | <br> <br>                                           | <br> <br> Not rated<br>                                           |                              |
| 504:<br>Badland, sea cliffs      | <br>  55                    | <br> <br> Not rated                                               | <br> <br>                                 | <br> <br> Not rated                                                         | <br> <br>                                           | <br> <br> Not rated                                               |                              |
| Typic Cryorthents                | <br>  45<br>                | <br> Very limited<br>  Slope                                      | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                                | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                      | 1.00                         |
| 505:<br>Beaches                  | <br> <br>  90               | <br> <br> Not rated<br>                                           | <br> <br> <br>                            | <br> <br> Not rated<br>                                                     | <br> <br> <br>                                      | <br> <br> Not rated<br>                                           |                              |
| 506:<br>Beluga                   | <br>  85<br>                | <br> Very limited<br>  Depth to saturated zone                    |                                           | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> 1.00<br> 0.50                             | <br> Very limited<br>  Depth to saturated zone                    | <br> <br> 1.00<br>           |
| 507:<br>Beluga                   | <br> <br>  87<br> <br>      | <br> Very limited<br>  Depth to saturated zone                    | <br> <br> <br> 1.00                       | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> <br> 1.00<br> 0.50                        | <br> Very limited<br>  Depth to saturated zone<br>  Slope         | <br> <br> 1.00<br> 0.12      |
| 508:<br>Beluga                   | <br> <br>  87<br> <br> <br> | <br> Very limited<br>  Depth to saturated zone<br>  Slope         | <br> <br> <br> 1.00<br> 0.16<br>          | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell<br>  Slope | <br> <br> 1.00<br> 0.50<br> 0.16                    | <br> Very limited<br>  Slope<br>  Depth to saturated zone         | <br> <br> 1.00<br> 1.00      |
| 509:<br>Beluga                   | <br> <br>  55<br>           | <br> <br> Very limited<br>  Depth to saturated zone<br>           | •                                         | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> <br> 1.00<br> 0.50                        | <br> Very limited<br>  Depth to saturated zone<br>                | <br> <br> <br> 1.00          |
| Mutnala                          | <br>  40<br>                | <br> Not limited<br>                                              | <br> <br>                                 | <br> Not limited<br>                                                        | <br> <br>                                           | <br> Somewhat limited<br>  Slope                                  | <br> <br> 0.50               |
| 510:<br>Beluga                   | <br> <br>  60<br>           | <br> <br> Very limited<br>  Depth to saturated zone<br>           | •                                         | <br> <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell       | <br> <br> <br> 1.00<br> 0.50                        | <br> <br> Very limited<br>  Depth to saturated zone<br>  Slope    | <br> <br> <br> 1.00<br> 0.12 |
| Smokey Bay                       | <br>  37<br> <br>           | <br> Very limited<br>  Depth to saturated zone<br>                | <br> <br> 1.00<br>                        | <br> Very limited<br>  Depth to saturated zone<br>                          | <br> <br> 1.00<br>                                  | <br> Very limited<br>  Depth to saturated zone<br>  Slope         | <br> <br> 1.00<br> 0.50      |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name          | soil name of Standard criteria) |                                                                    | Dwellings with baseme (Standard criteria) | nts                                                                         | Small commercial buildings<br>  (Standard criteria) |                                                                |                         |
|-----------------------------------|---------------------------------|--------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------|-------------------------|
|                                   | map<br> unit<br> <br>           | Rating class and limiting features                                 | Value<br> <br>                            | Rating class and limiting features                                          | Value<br> <br>                                      | Rating class and limiting features                             | Value<br> <br>          |
| 511:<br>Beluga                    | <br> <br>  50<br> <br>          | <br> <br> Very limited<br>  Depth to saturated zone<br>  Slope<br> | <br> <br> <br> 1.00<br> 0.16              | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell<br>  Slope | <br> <br> 1.00<br> 0.50<br> 0.16                    | <br> <br> Very limited<br>  Slope<br>  Depth to saturated zone | <br> <br> 1.00<br> 1.00 |
| Smokey Bay                        | <br>  47<br> <br>               | <br> Very limited<br>  Depth to saturated zone<br>  Slope          | <br> <br> 1.00<br> 0.63                   | <br> Very limited<br>  Depth to saturated zone<br>  Slope                   | <br> <br> 1.00<br> 0.63                             | <br> Very limited<br>  Slope<br>  Depth to saturated zone      | <br> 1.00<br> 1.00      |
| 512:<br>Benka                     | <br> <br>  86<br>               | <br> <br> Not limited<br>                                          | <br> <br> <br>                            | <br> <br> Not limited<br>                                                   | <br> <br> <br>                                      | <br> <br> Not limited<br>                                      | <br> <br>               |
| 513:<br>Benka                     | <br>  90<br>                    | <br> Not limited<br>                                               | <br> <br>                                 | <br> Not limited<br>                                                        | <br> <br>                                           | <br> Somewhat limited<br>  Slope                               | 0.50                    |
| 514:<br>Benka                     | <br> <br>  85<br> <br>          | <br> <br> Somewhat limited<br>  Slope                              | <br> <br> <br> 0.37                       | <br> -<br> Somewhat limited<br>  Slope                                      | <br> <br> <br> 0.37                                 | <br> Very limited<br>  Slope<br>                               | <br> <br> <br> 1.00     |
| 515:<br>Benka                     | <br>  90<br>                    | <br> Very limited<br>  Slope                                       | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                                | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                   | 1.00                    |
| 516:<br>Benka                     | <br> <br>  95<br>               | <br> Very limited<br>  Slope                                       | <br> <br> <br> 1.00                       | <br> Very limited<br>  Slope                                                | <br> <br> <br> 1.00                                 | <br> Very limited<br>  Slope                                   | 1.00                    |
| 517:<br>Benka, strongly sloping - | <br> <br>  45<br>               | <br> Somewhat limited<br>  Slope                                   | <br> <br> 0.63                            | <br> Somewhat limited<br>  Slope                                            | <br> <br> <br> 0.63                                 | <br> <br> Very limited<br>  Slope                              | 1.00                    |
| Benka, gently sloping             | <br>  40<br>                    | <br> Not limited<br>                                               | <br> <br>                                 | <br> Not limited<br>                                                        | <br> <br>                                           | <br> Somewhat limited<br>  Slope                               | 0.12                    |
| 518:<br>Boxcar                    | <br> <br>  75<br>               | <br> <br> Not limited<br>                                          | <br> <br> <br>                            | <br> <br> Not limited<br>                                                   | <br> <br> <br>                                      | <br> <br> Not limited<br>                                      | <br> <br> <br>          |
| 519:<br>Boxcar                    | <br>  80<br>                    | <br> Very limited<br>  Slope                                       | 1.00                                      | <br> Very limited<br>  Slope                                                | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                   | 1.00                    |
| 520:<br>Boxcar                    | <br> <br>  85<br>               | <br> Very limited<br>  Slope                                       | <br> <br> <br> 1.00                       | <br> Very limited<br>  Slope                                                | <br> <br> <br> 1.00                                 | <br> Very limited<br>  Slope                                   | 1.00                    |
| 521:<br>Boxcar, cool              | <br> <br>  80                   | <br> <br> Not limited<br>                                          | <br> <br> <br>                            | <br> <br> Not limited<br>                                                   | <br> <br> <br>                                      | <br> <br> Not limited<br>                                      | <br> <br> <br>          |
| 522:<br>Boxcar, cool              | <br>  80<br>                    | <br> Very limited<br>  Slope                                       | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                                | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                   | 1.00                    |
| 523:<br>Chenega                   | <br> <br>  85<br> <br>          | <br> <br> Very limited<br>  Flooding<br>                           | <br> <br> <br> 1.00                       | <br> <br> Very limited<br>  Flooding<br>                                    | <br> <br> <br> 1.00                                 | <br> <br> Very limited<br>  Flooding<br>                       | <br> <br> <br> 1.00     |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name                 | Pct.   Dwellings without basements   of   (Standard criteria) |                                                                  | Dwellings with baseme (Standard criteria) | nts                                                                                                         | Small commercial buildings<br>  (Standard criteria) |                                                                                                                       |                                           |
|------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                          | map<br> unit<br> <br>                                         |                                                                  | Value<br> <br>                            |                                                                                                             | Value<br> <br>                                      |                                                                                                                       | Value<br> <br>                            |
| 524:<br>Chenega, cool                    | <br> <br>  90<br>                                             | <br> <br> Very limited<br>  Flooding                             | <br> <br> <br> 1.00                       | <br> <br> Very limited<br>  Flooding                                                                        | <br> <br> <br> 1.00                                 | <br> <br> Very limited<br>  Flooding                                                                                  | <br> <br> <br> 1.00                       |
| 525:<br>Chenega, occasionally<br>flooded | <br> <br>  85<br>                                             | <br> <br> Very limited<br>  Flooding                             | <br> <br> <br> <br> 1.00                  | <br> <br> Very limited<br>  Flooding                                                                        | <br> <br> <br> <br> 1.00                            | <br> <br> Very limited<br>  Flooding                                                                                  | <br> <br> <br> <br> 1.00                  |
| 526:<br>Chulitna                         | <br> <br>  90                                                 | <br> <br> Not limited<br>                                        | <br> <br> <br>                            | <br> <br> Not limited<br>                                                                                   | <br> <br> <br>                                      | <br> <br> Not limited<br>                                                                                             | <br> <br> <br>                            |
| 527:<br>Chulitna                         | <br>  80<br>                                                  | <br> Not limited<br>                                             | <br> <br>                                 | <br> Not limited<br>                                                                                        | <br> <br>                                           | <br> Somewhat limited<br>  Slope                                                                                      | <br> <br> 0.50                            |
| 528:<br>Chulitna                         | <br> <br>  85<br>                                             | <br> <br> Somewhat limited<br>  Slope                            | <br> <br> <br> 0.63                       | <br> <br> Somewhat limited<br>  Slope                                                                       | <br> <br> <br> 0.63                                 | <br> <br> Very limited<br>  Slope                                                                                     | <br> <br> <br> 1.00                       |
| 529:<br>Chulitna                         | <br>  85<br>                                                  | <br> Very limited<br>  Slope                                     | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                                                                | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                                                                          | <br> <br> 1.00                            |
| 530:<br>Chunilna                         | <br> <br>  92<br>                                             | <br> <br> Very limited<br>  Depth to saturated zone              | <br> <br> <br> 1.00                       | <br> <br> Very limited<br>  Depth to saturated zone                                                         | <br> <br> <br> 1.00                                 | <br> <br> Very limited<br>  Depth to saturated zone                                                                   | <br> <br> <br> 1.00                       |
| 531:<br>Chunilna                         | <br>  82<br>                                                  | <br> Very limited<br>  Depth to saturated zone                   | <br> <br> <br> 1.00                       | <br> Very limited<br>  Depth to saturated zone                                                              | <br> <br> <br> 1.00                                 | <br> Very limited<br>  Depth to saturated zone<br>  Slope                                                             | <br> <br> 1.00<br> 0.50                   |
| 532:<br>Chunilna, cool                   | <br> <br>  80<br>                                             | <br> <br> Very limited<br>  Depth to saturated zone<br>          |                                           | <br> <br> Very limited<br>  Depth to saturated zone<br>                                                     |                                                     | <br> <br> Very limited<br>  Depth to saturated zone<br>                                                               | <br> <br> <br> 1.00                       |
| 533:<br>Chunilna, cool                   | <br>  85<br> <br>                                             | <br> Somewhat limited<br>  Depth to saturated zone<br>  Slope    | <br> <br> 0.99<br> 0.16                   | <br> Very limited<br>  Depth to saturated zone<br>  Slope                                                   |                                                     | <br> Very limited<br>  Slope<br>  Depth to saturated zone                                                             | <br> <br> 1.00<br> 0.99                   |
| 534:<br>Clam Gulch                       | <br> <br>  85<br>                                             | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell | <br> <br> <br> 1.00<br> 0.50              | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell                                            | <br> <br> <br> 1.00<br> 0.50                        | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell                                                      | <br> <br> <br> 1.00<br> 0.50              |
| 535:<br>Clunie                           | <br>  90<br> <br> <br> <br> <br> <br>                         | Depth to saturated zone                                          | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Flooding<br>  Depth to saturated zone<br>  Shrink-swell | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.50  | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Flooding<br>  Depth to saturated zone<br>  Organic matter content | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |
| 536:<br>Coal Creek                       | <br>  75<br> <br>                                             | <br> Very limited<br>  Flooding<br>  Depth to saturated zone<br> | 1.00                                      | <br> Very limited<br>  Flooding<br>  Depth to saturated zone<br>                                            | <br> <br> 1.00<br> 1.00                             | <br> Very limited<br>  Flooding<br>  Depth to saturated zone<br>                                                      | <br> <br> 1.00<br> 1.00                   |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name | Pct.   Dwellings without basements  <br>  of   (Standard criteria)  <br> map |                                                           |                              | <br>  Dwellings with baseme<br>  (Standard criteria)      | nts                              | Small commercial buildings<br>  (Standard criteria)            |                              |  |
|--------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------|-----------------------------------------------------------|----------------------------------|----------------------------------------------------------------|------------------------------|--|
|                          | map<br> unit<br>                                                             |                                                           | Value<br> <br>               |                                                           | Value<br> <br>                   |                                                                | Value<br> <br>               |  |
| 537:<br>Coal Creek       | 88<br> <br>                                                                  | <br>                                                      |                              | <br> <br> Very limited<br>  Depth to saturated zone       | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> <br> 1.00<br> 0.12 |  |
| 538:<br>Coal Creek       | <br>   88<br> <br>                                                           | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> <br> 1.00<br> 0.37 | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> <br> 1.00<br> 0.37<br> | <br> Very limited<br>  Slope<br>  Depth to saturated zone      | <br> <br> 1.00<br> 1.00      |  |
| 539:<br>Cohoe            | <br>  87                                                                     | <br> Not limited<br>                                      | <br> <br>                    | <br> Not limited<br>                                      | j<br> <br>                       | <br> Not limited<br>                                           | <br> <br>                    |  |
| 540:<br>Cohoe            | 85<br>                                                                       | <br> Not limited<br>                                      | <br> <br>                    | <br> Not limited<br>                                      | <br> <br>                        | <br> Somewhat limited<br>  Slope                               | 0.50                         |  |
| 541:<br>Cohoe            | <br>  89<br>                                                                 | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37          | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37              | <br> Very limited<br>  Slope                                   | <br> <br> <br> 1.00          |  |
| 542:<br>Cohoe            | <br>  93<br>                                                                 | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00          | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                   | <br> <br> <br> 1.00          |  |
| 543:<br>Cohoe            | 80<br>                                                                       | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00          | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                   | <br> <br> 1.00               |  |
| 544:<br>Cohoe            | 84<br>                                                                       | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00          | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                   | <br> <br> <br> 1.00          |  |
| 545:<br>Cohoe, dry       | 87                                                                           | <br> <br> Not limited                                     | <br> <br> <br>               | I<br> <br> Not limited<br>                                | <br> <br> <br>                   | <br> <br> Not limited                                          |                              |  |
| 546:<br>Cohoe, dry       | 85<br>                                                                       | <br> Not limited                                          | <br> <br> <br>               | <br> Not limited<br>                                      | <br> <br> <br>                   | <br> Somewhat limited<br>  Slope                               | 0.50                         |  |
| 547:<br>Cohoe, dry       | <br>  89<br>                                                                 | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37          | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37              | <br> Very limited<br>  Slope                                   | <br> <br> 1.00               |  |
| 548:<br>Cohoe, dry       | 93<br>                                                                       | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                   | <br> <br> <br> 1.00          |  |
| 549:<br>Cohoe, dry       | 80<br>                                                                       | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00          |  |
| 550:<br>Cohoe, dry       | <br>   84<br>                                                                | <br> <br> Very limited<br>  Slope<br>                     | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope<br>                     | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope<br>                          | <br> <br> <br> 1.00          |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name                | <br>  Pct.<br>  of<br> map | Dwellings without basem (Standard criteria)                                                | nents                       | Dwellings with baseme (Standard criteria)                          | nts                      | <br>  Small commercial build<br>  (Standard criteria)                                      |                             |
|-----------------------------------------|----------------------------|--------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------|-----------------------------|
|                                         | map<br> unit<br>           | Rating class and limiting features                                                         | Value<br> <br>              | Rating class and limiting features                                 | Value<br> <br>           | Rating class and limiting features                                                         | Value<br> <br>              |
| 551:<br>Cohoe, moderately<br>steep      | <br> <br> <br>  45<br>     | <br> <br> <br> Very limited<br>  Slope                                                     | 1.00                        | <br> <br> Very limited<br>  Slope                                  | <br> <br> <br> <br> 1.00 | <br> <br> Very limited<br>  Slope                                                          | 1.00                        |
| Cohoe, gently sloping                   | <br>  40<br>               | <br> Not limited<br>                                                                       | <br> <br>                   | <br> Not limited<br>                                               | <br> <br>                | <br> Somewhat limited<br>  Slope                                                           | <br> <br> 0.50              |
| 552:<br>Cohoe, dry,<br>moderately steep | <br> <br> <br>  45<br>     | <br> <br> <br> Very limited<br>  Slope                                                     | <br> <br> <br> <br> 1.00    | <br> <br> <br> Very limited<br>  Slope                             | <br> <br> <br> <br> 1.00 | <br> <br> <br> Very limited<br>  Slope                                                     | <br> <br> <br> 1.00         |
| Cohoe, dry, gently sloping              | <br>  40<br>               | <br> <br> Not limited<br>                                                                  | <br> <br> <br>              | <br> <br> Not limited<br>                                          | <br> <br> <br>           | <br> Somewhat limited<br>  Slope                                                           | 0.50                        |
| 553:<br>Cohoe, dry                      | <br> <br>  55<br>          | <br> <br> Somewhat limited<br>  Slope                                                      | <br> <br> <br> 0.37         | <br> <br> Somewhat limited<br>  Slope                              | <br> <br> <br> 0.37      | <br> <br> Very limited<br>  Slope                                                          | <br> <br> 1.00              |
| Kenai                                   | <br>  30<br> <br>          | <br> Somewhat limited<br>  Shrink-swell<br>  Slope                                         | <br> <br> 0.50<br> 0.37     | <br> Somewhat limited<br>  Shrink-swell<br>  Slope                 | <br> <br> 0.50<br> 0.37  | <br> Very limited<br>  Slope<br>  Shrink-swell                                             | <br> 1.00<br> 0.50          |
| 554:<br>Cohoe, dry                      | <br> <br>  55<br>          | <br> Very limited<br>  Slope                                                               | <br> <br> <br> 1.00         | <br> <br> Very limited<br>  Slope                                  | <br> <br> <br> 1.00      | <br> <br> Very limited<br>  Slope                                                          | 1.00                        |
| Kenai                                   | <br>  30<br> <br>          | <br> Very limited<br>  Slope<br>  Shrink-swell                                             | <br> <br> 1.00<br> 0.50     | <br> Very limited<br>  Slope<br>  Shrink-swell                     | <br> <br> 1.00<br> 0.50  | <br> Very limited<br>  Slope<br>  Shrink-swell                                             | <br> 1.00<br> 0.50          |
| 555:<br>Cohoe, dry                      | <br> <br>  70<br>          | <br> Very limited<br>  Slope                                                               | <br> <br> <br> 1.00         | <br> Very limited<br>  Slope                                       | <br> <br> <br> 1.00      | <br> Very limited<br>  Slope                                                               | 1.00                        |
| Nikolai                                 | <br>  30<br> <br> <br>     | Very limited   Subsidence   Depth to saturated zone   Organic matter content               | !                           | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone     | <br> 1.00<br> 1.00<br>   | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00 |
| 556:<br>Cohoe, dry                      | <br> <br>  70<br>          | <br> <br> Not limited<br>                                                                  | <br> <br> <br>              | <br> <br> Not limited<br>                                          | <br> <br> <br>           | <br> <br> Somewhat limited<br>  Slope                                                      | <br> <br> <br> 0.50         |
| Nikolai                                 | <br>  30<br> <br> <br>     | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br> | <br> 1.00<br> 1.00<br>   | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00 |
| 557:<br>Cytex Creek                     | <br>  75<br> <br> <br>     | <br> Very limited<br>  Depth to saturated zone<br>                                         | <br> <br> 1.00<br>          | <br> Very limited<br>  Depth to saturated zone<br>                 | <br> <br> 1.00<br>       | <br> Very limited<br>  Depth to saturated zone<br>  Slope<br>                              | <br> 1.00<br> 0.50          |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name | Pct.   Dwellings without basements   of   (Standard criteria)   map |                                                                        |                                  | <br>  Dwellings with baseme<br>  (Standard criteria)                    | nts                                  | Small commercial buildings<br>  (Standard criteria)                                                   |                                      |  |
|--------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------|--|
|                          | map<br> unit<br> <br>                                               | Rating class and limiting features                                     | Value<br> <br>                   |                                                                         | Value<br> <br>                       | Rating class and limiting features                                                                    | Value<br> <br>                       |  |
| 558:<br>Doroshin         | <br> <br>  83<br> <br> <br>                                         | Very limited Subsidence Depth to saturated zone organic matter content | <br> <br> 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br> | <br> <br> 1.00<br> 1.00              | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content            | <br> <br> 1.00<br> 1.00<br> 1.00     |  |
| 559:<br>Doroshin         | <br>  79<br> <br> <br> <br>                                         | Depth to saturated zone                                                | 1.00                             | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>      | <br> -<br> 1.00<br> 1.00<br> -       | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content<br>  Slope | <br> 1.00<br> 1.00<br> 1.00<br> 0.12 |  |
| 560:<br>Dystrocryepts    | <br> <br>  50<br>                                                   | <br> Very limited<br>  Slope                                           | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                            | <br> <br> <br> 1.00                  | <br> Very limited<br>  Slope                                                                          | <br> <br> <br> 1.00                  |  |
| Typic Cryorthents        | <br>  30<br>                                                        | <br> Very limited<br>  Slope                                           | <br> <br> 1.00                   | l<br> Very limited<br>  Slope                                           | <br> <br> 1.00                       | <br> Very limited<br>  Slope                                                                          | <br> <br> 1.00                       |  |
| Iliamna, cool            | <br>  20<br>                                                        | <br> Very limited<br>  Slope                                           | <br> <br> 1.00                   | <br> Very limited<br>  Slope                                            | <br> <br> 1.00                       | <br> Very limited<br>  Slope                                                                          | <br> <br> 1.00                       |  |
| 561:<br>Foreland         | <br> <br>  79<br>                                                   | <br> <br> Very limited<br>  Depth to saturated zone                    | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Depth to saturated zone                     | <br> <br> <br> 1.00                  | <br> <br> Very limited<br>  Depth to saturated zone                                                   | <br> <br> <br> 1.00                  |  |
| 562:<br>Foreland         | <br>  59<br>                                                        | <br> Very limited<br>  Depth to saturated zone                         |                                  | <br> Very limited<br>  Depth to saturated zone                          | <br> <br> 1.00                       | <br> Very limited<br>  Depth to saturated zone                                                        | 1.00                                 |  |
| Soldotna                 | <br>  20<br>                                                        | <br> Not limited<br>                                                   | <br> <br>                        | <br> Not limited<br>                                                    | <br> <br>                            | <br> Somewhat limited<br>  Slope                                                                      | <br> <br> 0.50                       |  |
| Starichkof               | <br>  20<br> <br> <br> <br> <br>                                    | Depth to saturated zone                                                | 1.00<br> 1.00                    | Depth to saturated zone                                                 | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | Very limited Ponding Subsidence Depth to saturated zone Organic matter content                        |                                      |  |
| 563:<br>Pits, gravel     | <br>  95                                                            | <br> <br> Not rated<br>                                                | <br> <br>                        | <br> <br> Not rated<br>                                                 | <br> <br>                            | <br> <br> Not rated<br>                                                                               |                                      |  |
| 564:<br>Iliamna          | <br> <br>  80                                                       | <br> <br> Not limited                                                  | <br> <br>                        | <br> <br> Not limited                                                   | <br> <br>                            | <br> <br> Not limited                                                                                 |                                      |  |
| 565:<br>Iliamna          | <br> <br>  82<br>                                                   | <br> Somewhat limited<br>  Slope                                       | <br> <br> <br> 0.16              | <br> Somewhat limited<br>  Slope                                        | <br> <br> <br> 0.16                  | <br> Very limited<br>  Slope                                                                          | <br> <br> <br> 1.00                  |  |
| 566:<br>Iliamna          | <br> <br>  80<br>                                                   | <br> Very limited<br>  Slope                                           | <br> <br> <br> 1.00              | <br> Very limited<br>  Slope                                            | <br> <br> <br> 1.00                  | <br> Very limited<br>  Slope                                                                          | <br> <br> 1.00                       |  |
| 567:<br>Iliamna, cool    | <br> <br>  90                                                       | <br> <br> Not limited<br>                                              | <br> <br> <br>                   | I<br> <br> Not limited<br>                                              | <br> <br> <br>                       | <br> <br> Not limited<br>                                                                             |                                      |  |
| 568:<br>Island           | <br> <br>  90<br>                                                   | <br> <br> Not limited<br>                                              | <br> <br> <br>                   | <br> <br> Not limited<br>                                               | <br> <br> <br>                       | <br> <br> Not limited<br>                                                                             |                                      |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name   | Pct. of                | Dwellings without bas (Standard criteri   |                | <br>  Dwellings with baser<br>  (Standard criteria) | ments          | Small commercial bu (Standard criteri     |                     |
|----------------------------|------------------------|-------------------------------------------|----------------|-----------------------------------------------------|----------------|-------------------------------------------|---------------------|
|                            | map<br> unit<br> <br>  | Rating class and limiting features        | Value<br> <br> |                                                     | Value<br> <br> | Rating class and limiting features        | Value<br> <br>      |
| 569:<br>Island             | <br> <br>  91<br>      | <br> <br> Not limited<br>                 |                | <br> <br> Not limited<br>                           |                | <br> <br> Somewhat limited<br>  Slope     | 0.50                |
| 570:<br>Island             | <br> <br>  90<br>      | <br> Somewhat limited<br>  Slope          | 0.63           | <br> Somewhat limited<br>  Slope<br>                | <br> <br> 0.63 | <br> Very limited<br>  Slope<br>          | <br> <br> 1.00      |
| 571:<br>Island             | <br>  92<br>           | <br> Very limited<br>  Slope<br>          | 1.00           | <br> Very limited<br>  Slope<br>                    | 1.00           | <br> Very limited<br>  Slope<br>          | <br> <br> 1.00      |
| 572: Island, forested      | <br>  90<br>           | <br> <br> Not limited<br>                 | İ              | <br> <br> Not limited<br>                           |                | <br> <br> Not limited<br>                 |                     |
| 573:<br>Kachemak           | <br>  80<br>           | <br> Not limited<br>                      | i<br>I<br>I    | <br> Not limited<br>                                | i<br>I         | <br> Somewhat limited<br>  Slope          | <br> <br> 0.50      |
| 574:<br>Kachemak           | <br> <br>  80<br>      | <br> <br> Somewhat limited<br>  Slope<br> | 0.37           | <br> <br> Somewhat limited<br>  Slope<br>           | <br> <br> 0.37 | <br> <br> Very limited<br>  Slope<br>     | 1.00                |
| 575:<br>Kachemak           | <br> <br>  80<br>      | <br> Very limited<br>  Slope              | 1.00           | <br> Very limited<br>  Slope                        | 1.00           | <br> Very limited<br>  Slope              | 1.00                |
| 576:<br>Kachemak           | <br> <br>  80<br>      | <br> Very limited<br>  Slope              | 1.00           | <br> Very limited<br>  Slope                        | 1.00           | <br> Very limited<br>  Slope              | 1.00                |
| 577:<br>Kachemak           | <br>  90<br>           | <br> Very limited<br>  Slope              | 1.00           | <br> Very limited<br>  Slope                        | 1.00           | <br> Very limited<br>  Slope              | 1.00                |
| 578:<br>Kachemak, cool     | <br> <br>  80<br>      | <br> Not limited<br>                      |                | <br> <br> Not limited<br>                           |                | <br> <br> Somewhat limited<br>  Slope     | 0.50                |
| 579:<br>Kachemak, cool     | <br> <br>  80<br>      | <br> <br> Somewhat limited<br>  Slope     | 0.37           | <br> Somewhat limited<br>  Slope                    | 0.37           | <br> Very limited<br>  Slope              | 1.00                |
| 580:<br>Kachemak, cool     | <br> <br>  80<br>      | <br> Very limited<br>  Slope              | <br> <br> 1.00 | <br> Very limited<br>  Slope                        | 1.00           | <br> Very limited<br>  Slope              | 1.00                |
| 581:<br>Kachemak, cool     | <br> <br>  80<br>      | <br> <br> Very limited<br>  Slope         | 1.00           | <br> <br> Very limited<br>  Slope                   | 1.00           | <br> <br> Very limited<br>  Slope         | <br> <br> 1.00      |
| 582:<br>Kachemak, cool     | <br> <br>  80<br>      | <br> <br> Very limited<br>  Slope         | 1.00           | <br> <br> Very limited<br>  Slope                   | 1.00           | <br> <br> Very limited<br>  Slope         | 1.00                |
| 583:<br>Kachemak, forested | <br> <br>  75<br> <br> | <br> <br> Not limited<br> <br>            |                | <br> <br> Not limited<br> <br>                      |                | <br> <br> Somewhat limited<br>  Slope<br> | <br> <br> <br> 0.50 |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name   | Pct. of                | Dwellings without basem (Standard criteria)               | nents                   | <br>  Dwellings with baseme<br>  (Standard criteria)      | nts                     | <br>  Small commercial buildi<br>  (Standard criteria)    | ings                    |
|----------------------------|------------------------|-----------------------------------------------------------|-------------------------|-----------------------------------------------------------|-------------------------|-----------------------------------------------------------|-------------------------|
|                            | map<br> unit<br> <br>  | Rating class and limiting features                        | Value<br> <br> <br>     | Rating class and limiting features                        | Value<br> <br> <br>     | Rating class and limiting features                        | Value<br> <br>          |
| 584:<br>Kachemak, forested | <br> <br>  85<br>      | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> 0.37     | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> 0.37     | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00     |
| 585:<br>Kachemak, forested | <br> <br>  80<br> <br> |                                                           | <br> <br> <br> 1.00     | <br> <br> Very limited<br>  Slope<br>                     | <br> <br> <br> 1.00     | <br> <br> Very limited<br>  Slope<br>                     | <br> <br> <br> 1.00     |
| 586:<br>Kachemak, cool     | <br>  60               | <br> Not limited                                          | į<br>Į                  | <br> Not limited                                          | į<br>Į                  | <br> Not limited                                          | į<br>Į                  |
| Snowdance                  | <br>  40<br>           | <br> Very limited<br>  Depth to saturated zone            | <br> <br> 1.00<br>      | <br> Very limited<br>  Depth to saturated zone<br>        | <br> <br> 1.00<br>      | <br> Very limited<br>  Depth to saturated zone<br>        | <br> <br> 1.00          |
| 587:<br>Kachemak, cool     | <br>  65<br>           | <br> Not limited<br>                                      | <br> <br>               | <br> Not limited<br>                                      | <br> <br>               | <br> Somewhat limited<br>  Slope                          | <br> <br> 0.50          |
| Snowdance                  | <br>  35<br> <br>      | <br> Very limited<br>  Depth to saturated zone<br>        | <br> <br> 1.00<br>      | <br> Very limited<br>  Depth to saturated zone<br>        | <br> <br> 1.00<br>      | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 0.50 |
| 588:<br>Kachemak, cool     | <br> <br>  70<br>      | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37     | <br> Somewhat limited<br>  Slope                          | <br> <br> <br> 0.37     | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00     |
| Snowdance                  | <br>  30<br> <br>      | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 0.37 | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 0.37 | <br> Very limited<br>  Slope<br>  Depth to saturated zone | <br> 1.00<br> 1.00      |
| 589:<br>Kalifonsky         | <br> <br>  83<br>      | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00     | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00     | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00     |
| 590:<br>Kalifonsky         | <br> <br>  85<br> <br> | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00<br> | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00<br> | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 0.50 |
| 591:<br>Kalifonsky         | <br>  50<br>           | <br> Very limited<br>  Depth to saturated zone            |                         | <br> Very limited<br>  Depth to saturated zone            | <br> <br> 1.00          | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 0.12 |
| Typic Cryorthents          | <br>  30<br>           | <br> Very limited<br>  Slope                              | <br> <br> 1.00          | <br> Very limited<br>  Slope                              | <br> <br> 1.00          | <br> Very limited<br>  Slope                              | <br> <br> 1.00          |
| 592:<br>Karluk             | <br> <br>  80<br>      | <br> -<br> Very limited<br>  Depth to saturated zone<br>  | <br> <br> <br> 1.00     | <br> -<br> Very limited<br>  Depth to saturated zone<br>  | <br> <br> <br> 1.00     | <br> -<br> Very limited<br>  Depth to saturated zone<br>  | <br> <br> <br> 1.00     |
| 593:<br>Kashwitna          | <br>  85               | <br> Not limited                                          | į<br>Į                  | <br> Not limited                                          | į<br>Į                  | <br> Not limited                                          |                         |
| 594:<br>Kashwitna          | <br> <br>  88<br>      | <br> Not limited<br>                                      | <br> <br> <br> <br>     | <br> Not limited<br>                                      | <br> <br> <br> <br>     | <br> -<br> Somewhat limited<br>  Slope<br>                | <br> <br> <br> 0.50     |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name               | Pct. Dwellings without basements of (Standard criteria) |                                                                                |                                      | Dwellings with baseme (Standard criteria)                                                               | Small commercial build<br>  (Standard criteria) |                                                                                                         |                                      |
|----------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------|
|                                        | map<br> unit<br> <br>                                   |                                                                                | Value<br> <br>                       | Rating class and limiting features                                                                      | Value<br> <br> <br>                             | Rating class and limiting features                                                                      | Value                                |
| 595:<br>Kashwitna                      | <br> <br>  85<br>                                       | <br> <br> Somewhat limited<br>  Slope                                          | <br> <br> <br> 0.63                  | <br> <br> Somewhat limited<br>  Slope                                                                   | <br> <br> <br> 0.63                             | <br> <br> Very limited<br>  Slope                                                                       | <br> <br> <br> 1.00                  |
| 596:<br>Kashwitna,<br>moderately steep | <br> <br> <br>  50                                      | <br> <br> Very limited<br>  Slope                                              | <br> <br> <br> <br> 1.00             | <br> <br> Very limited<br>  Slope                                                                       | <br> <br> <br> <br> 1.00                        | <br> <br> Very limited<br>  Slope                                                                       | 1.00                                 |
| Kashwitna, strongly sloping            | <br> <br>  40<br>                                       | <br> Somewhat limited<br>  Slope                                               | <br> <br> <br> 0.96                  | <br> Somewhat limited<br>  Slope                                                                        | <br> <br> <br> 0.96                             | <br> Very limited<br>  Slope                                                                            | 1.00                                 |
| 597:<br>Kenai                          | <br>  81<br>                                            | <br> Somewhat limited<br>  Shrink-swell                                        | <br> <br> 0.50                       | <br> Somewhat limited<br>  Shrink-swell                                                                 | <br> <br> 0.50                                  | <br> Somewhat limited<br>  Shrink-swell                                                                 | 0.50                                 |
| 598:<br>Kenai                          | <br>  82<br> <br>                                       | <br> Somewhat limited<br>  Shrink-swell<br>                                    | <br> <br> 0.50<br>                   | <br> Somewhat limited<br>  Shrink-swell<br>                                                             | <br> <br> 0.50<br>                              | <br> Somewhat limited<br>  Slope<br>  Shrink-swell                                                      | <br> 0.50<br> 0.50                   |
| 599:<br>Kenai                          | <br> <br>  85<br> <br>                                  | <br> Somewhat limited<br>  Shrink-swell<br>  Slope                             | <br> <br> <br> 0.50<br> 0.37         | <br> Somewhat limited<br>  Shrink-swell<br>  Slope                                                      | <br> <br> <br> 0.50<br> 0.37                    | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50              |
| 600:<br>Kenai                          | <br> <br>  88<br> <br>                                  | <br> Very limited<br>  Slope<br>  Shrink-swell                                 | <br> <br> 1.00<br> 0.50              | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50                         | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50              |
| 601:<br>Kenai                          | <br> <br>  86<br> <br>                                  | <br> Very limited<br>  Slope<br>  Shrink-swell                                 | <br> <br> 1.00<br> 0.50              | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50                         | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50              |
| 602:<br>Kenai, moderately<br>steep     | <br> <br> <br>  45<br>                                  | <br> <br> Very limited<br>  Slope<br>  Shrink-swell                            | <br> <br> <br> <br> 1.00<br> 0.50    | <br> <br> Very limited<br>  Slope<br>  Shrink-swell                                                     | <br> <br> <br> <br> 1.00<br> 0.50               | <br> <br> Very limited<br>  Slope<br>  Shrink-swell                                                     | <br> <br> <br> 1.00<br> 0.50         |
| Kenai, gently sloping                  | <br>  40<br> <br>                                       | <br> Somewhat limited<br>  Shrink-swell<br>                                    | <br> <br> 0.50<br>                   | <br> Somewhat limited<br>  Shrink-swell<br>                                                             | <br> <br> 0.50<br>                              | <br> Somewhat limited<br>  Slope<br>  Shrink-swell                                                      | <br> 0.50<br> 0.50                   |
| 603:<br>Kenai                          | <br> <br>  60<br>                                       | <br> Somewhat limited<br>  Slope<br>  Shrink-swell                             | <br> <br> <br> 0.63<br> 0.50         | <br> Somewhat limited<br>  Slope<br>  Shrink-swell                                                      | <br> <br> <br> 0.63<br> 0.50                    | <br> Very limited<br>  Slope<br>  Shrink-swell                                                          | <br> <br> 1.00<br> 0.50              |
| Starichkof                             | <br>  31<br> <br> <br> <br> <br>                        | Very limited Ponding Subsidence Depth to saturated zone Organic matter content | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00<br> 1.00            | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name    | Pct.                   | <br>  Dwellings without basem<br>  (Standard criteria)            | nents                        | <br>  Dwellings with baseme<br>  (Standard criteria)              | nts                          | <br>  Small commercial build<br>  (Standard criteria)             | ings                    |
|-----------------------------|------------------------|-------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------|-------------------------|
|                             | map<br> unit<br> <br>_ |                                                                   | Value<br> <br>               |                                                                   | Value<br> <br>               |                                                                   | Value<br> <br>          |
| 604:<br>Kichatna            | 70                     | <br> <br> Not limited                                             | <br> <br> <br>               | <br> <br> Not limited                                             | <br> <br> <br>               | <br> <br> Not limited                                             |                         |
| 605:<br>Kichatna            | 75<br>                 | <br> Somewhat limited<br>  Slope                                  | <br> <br> 0.63               | <br> Somewhat limited<br>  Slope                                  | <br> <br> 0.63               | <br> Very limited<br>  Slope                                      | 1.00                    |
| 606:<br>Kichatna            | <br> <br>  75<br>      | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | 1.00                    |
| 607:<br>Kichatna            | <br> <br>  85<br>      | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | 1.00                    |
| 608:<br>Kichatna            | 70                     | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Slope                                 | <br> <br> <br> 1.00     |
| 609:<br>Kichatna            | 50<br>                 | <br> Very limited<br>  Slope                                      | <br> <br> 1.00               | <br> Very limited<br>  Slope                                      | <br> <br> 1.00               | <br> Very limited<br>  Slope                                      | <br> <br> 1.00          |
| Killey                      | 50<br> <br>            | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> <br> 1.00<br> 0.99      | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> <br> 1.00<br> 1.00      | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> 1.00<br> 0.99      |
| 610:<br>Kidazqeni           | <br> <br>  85<br>      | <br> <br> Very limited<br>  Flooding                              | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Flooding                              | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Flooding                              | 1.00                    |
| 611:<br>Killey              | <br>   45<br>          | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone | <br> <br> <br> 1.00<br> 0.99 | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Flooding<br>  Depth to saturated zone | <br> <br> 1.00<br> 0.99 |
| Moose River                 | <br>  45<br>           | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> <br> 1.00<br> 1.00      | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | 1.00                         | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> 1.00<br> 1.00      |
| 612:<br>Liten               | <br> <br>  85          | <br> <br> Not limited                                             | <br> <br>                    | <br> <br> Not limited<br>                                         | <br> <br>                    | <br> <br> Not limited<br>                                         | <br> <br>               |
| 613:<br>Lithic Haplocryands | <br>  55<br>           | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock      | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock      | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock      | <br> <br> 1.00<br> 1.00 |
| Alic Haplocryands           | 20<br>                 | <br> Very limited<br>  Slope<br>  Depth to hard bedrock           | <br> <br> 1.00<br> 0.32      | <br> Very limited<br>  Slope<br>  Depth to hard bedrock           | <br> <br> 1.00<br> 1.00      | <br> Very limited<br>  Slope<br>  Depth to hard bedrock           | <br> <br> 1.00<br> 0.32 |
| Rock outcrop                | <br>  17<br>           | Not rated                                                         |                              | Not rated                                                         |                              | Not rated                                                         |                         |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name    | Pct. of map                 | Dwellings without basem (Standard criteria)                                                              | nents                                         | <br>  Dwellings with baseme<br>  (Standard criteria)                                       | <br>  Small commercial buildi<br>  (Standard criteria) | ings                                                                                                    |                                               |
|-----------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|                             | unit                        |                                                                                                          | Value<br> <br> <br>                           | Rating class and limiting features                                                         | Value<br> <br> <br>                                    | Rating class and limiting features                                                                      | Value<br> <br>                                |
| 614:<br>Lithic Haplocryands | <br> <br> 55<br> <br>       | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock                                             | <br> <br> <br> 1.00<br> 1.00                  | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock                               | <br> <br> <br> 1.00<br> 1.00                           | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock                                            | <br> <br> <br> 1.00<br> 1.00                  |
| Alic Haplocryands           | 20                          | <br> Very limited<br>  Slope<br>  Depth to hard bedrock                                                  | <br> <br> 1.00<br> 0.32                       | <br> Very limited<br>  Slope<br>  Depth to hard bedrock                                    | <br> -<br> 1.00<br> 1.00                               | <br> Very limited<br>  Slope<br>  Depth to hard bedrock                                                 | <br> 1.00<br> 0.32                            |
| Rock outcrop                | 20                          | <br> Not rated<br>                                                                                       | <br> <br>                                     | l<br> Not rated<br>                                                                        | <br> <br>                                              | l<br> Not rated<br>                                                                                     | <br> <br>                                     |
| 615:<br>Longmare            | 80                          | <br> -<br> Somewhat limited<br>  Depth to saturated zone<br>                                             | <br> <br> <br> 0.39                           | <br> -<br> Very limited<br>  Depth to saturated zone<br>                                   | <br> <br> <br> 1.00                                    | <br> <br> Somewhat limited<br>  Depth to saturated zone<br>                                             | <br> <br> <br> 0.39                           |
| 616:<br>Longmare            | <br>  80<br> <br>           | <br> Somewhat limited<br>  Depth to saturated zone<br>                                                   |                                               | <br> Very limited<br>  Depth to saturated zone<br>                                         | <br> <br> 1.00<br>                                     | <br> Somewhat limited<br>  Slope<br>  Depth to saturated zone                                           | <br> <br> 0.50<br> 0.39                       |
| 617:<br>Mutnala             | <br>  75<br>                | <br> Not limited<br>                                                                                     | <br> <br>                                     | <br> Not limited<br>                                                                       | j<br> <br>                                             | <br> Not limited<br>                                                                                    | <br> <br>                                     |
| 618:<br>Mutnala             | 80                          | <br> Not limited<br> <br>                                                                                | <br> <br> <br>                                | <br> Not limited<br> <br>                                                                  | <br> <br> <br>                                         | <br> Somewhat limited<br>  Slope                                                                        | <br> <br> 0.50                                |
| 619:<br>Mutnala             | 85                          | <br> Somewhat limited<br>  Slope                                                                         | <br> <br> <br> 0.63                           | <br> Somewhat limited<br>  Slope                                                           | <br> <br> <br> 0.63                                    | <br> Very limited<br>  Slope                                                                            | <br> <br> 1.00                                |
| 620:<br>Mutnala             | 85                          | <br> Very limited<br>  Slope                                                                             | <br> <br> 1.00                                | <br> Very limited<br>  Slope                                                               | <br> <br> 1.00                                         | <br> Very limited<br>  Slope                                                                            | <br> <br> 1.00                                |
| 621:<br>Mutnala             | 85                          | <br> Very limited<br>  Slope                                                                             | <br> <br> 1.00                                | <br> Very limited<br>  Slope                                                               | <br> <br> 1.00                                         | <br> Very limited<br>  Slope                                                                            | <br> <br> 1.00                                |
| 622:<br>Mutnala             | 85                          | <br> Very limited<br>  Slope                                                                             | <br> <br> <br> 1.00                           | <br> Very limited<br>  Slope                                                               | <br> <br> 1.00                                         | <br> Very limited<br>  Slope                                                                            | <br> <br> 1.00                                |
| 623:<br>Mutnala             | <br>  45<br>                | <br> Very limited<br>  Slope                                                                             | <br> <br> 1.00                                | <br> Very limited<br>  Slope                                                               | <br> <br> 1.00                                         | <br> Very limited<br>  Slope                                                                            | <br> <br> 1.00                                |
| Starichkof                  | 35                          | <br>  Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          | Very limited Ponding Subsidence Depth to saturated zone Organic matter content             | <br> 1.00<br> 1.00<br> 1.00<br> 1.00                   | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| Slikok                      | <br>  20<br> <br> <br> <br> | Very limited   Ponding   Flooding   Depth to saturated zone   Organic matter content   Subsidence        | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br>  Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Subsidence | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00          | Very limited   Ponding   Flooding   Depth to saturated zone   Organic matter content   Subsidence       | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00 |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name              | Pct.                   | Dwellings without basen (Standard criteria)               | nents                        | Dwellings with baseme (Standard criteria)                          | nts                          | Small commercial buildings<br>  (Standard criteria)                |                         |  |
|---------------------------------------|------------------------|-----------------------------------------------------------|------------------------------|--------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------|-------------------------|--|
|                                       | map<br> unit<br> <br>  | Rating class and limiting features                        | Value<br> <br>               | Rating class and limiting features                                 | Value<br> <br>               | Rating class and limiting features                                 | Value<br> <br>          |  |
| 624:<br>Naptowne                      | <br> <br>  80          | <br> <br> Not limited<br>                                 | <br> <br> <br>               | <br> <br> Not limited<br>                                          | <br> <br> <br>               | <br> <br> Not limited<br>                                          |                         |  |
| 625:<br>Naptowne                      | <br>  80<br>           | <br> Not limited<br>                                      | <br> <br>                    | <br> Not limited<br>                                               | <br> <br>                    | <br> Somewhat limited<br>  Slope                                   | 0.50                    |  |
| 626:<br>Naptowne                      | <br> <br>  80<br>      | <br> <br> Somewhat limited<br>  Slope<br>                 | <br> <br> <br> 0.16          | <br> <br> Somewhat limited<br>  Slope<br>                          | <br> <br> <br> 0.16          | <br> <br> Very limited<br>  Slope<br>                              | 1.00                    |  |
| 627:<br>Naptowne                      | <br>  80<br>           | <br> Very limited<br>  Slope                              | <br> <br> 1.00               | <br> Very limited<br>  Slope                                       | <br> <br> 1.00               | <br> Very limited<br>  Slope                                       | <br> <br> 1.00          |  |
| 628:<br>Naptowne                      | <br> <br>  80          | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00          | <br> Very limited<br>  Slope                                       | <br> <br> <br> 1.00          | <br> Very limited<br>  Slope                                       | 1.00                    |  |
| 629:<br>Naptowne                      | <br> <br>  80          | <br> <br> Not limited<br>                                 | <br> <br> <br>               | <br> <br> Not limited<br>                                          | <br> <br> <br>               | <br> <br> Somewhat limited<br>  Slope                              | 0.50                    |  |
| 630: Naptowne, moderately steep       | <br> <br> <br>  45     | <br> <br> <br> Very limited<br>  Slope                    | <br> <br> <br> <br> 1.00     | <br> <br> <br> Very limited<br>  Slope                             | <br> <br> <br> <br> 1.00     | <br> <br> <br> Very limited<br>  Slope                             | <br> <br> <br> 1.00     |  |
| Naptowne, strongly sloping            | <br> <br>  40<br>      | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> 0.96          | <br> <br> Somewhat limited<br>  Slope                              | <br> <br> <br> 0.96          | <br> <br> Very limited<br>  Slope                                  | 1.00                    |  |
| 631:<br>Naptowne, strongly<br>sloping | <br> <br> <br>  45     | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> <br> 0.63     | <br> <br> Somewhat limited<br>  Slope                              | <br> <br> <br> <br> 0.63     | <br> <br> Very limited<br>  Slope                                  | 1.00                    |  |
| Naptowne, gently sloping              | <br>  40<br>           | <br> <br> Not limited<br>                                 | <br> <br> <br>               | <br> <br> Not limited<br>                                          | <br> <br> <br>               | <br> Somewhat limited<br>  Slope                                   | <br> <br> <br> 0.12     |  |
| 632:<br>Niklason                      | <br> <br>  85<br>      | <br> <br> Very limited<br>  Flooding                      | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Flooding                               | <br> <br> <br> 1.00          | <br> <br> Very limited<br>  Flooding                               | 1.00                    |  |
| 633:<br>Nikolaevsk                    | <br> <br>  85<br>      | <br> Very limited<br>  Depth to saturated zone            | <br> <br> <br> 1.00          | <br> Very limited<br>  Depth to saturated zone                     | <br> <br> <br> 1.00          | <br> Very limited<br>  Depth to saturated zone                     | 1.00                    |  |
| 634:<br>Nikolaevsk                    | 83                     | <br> Very limited<br>  Depth to saturated zone            | <br> <br> 1.00               | <br> <br> Very limited<br>  Depth to saturated zone<br>            | <br> <br> <br> 1.00          | <br> Very limited<br>  Depth to saturated zone<br>  Slope          | <br> 1.00<br> 0.50      |  |
| 635:<br>Nikolaevsk                    | <br> <br>  85<br> <br> | <br> Very limited<br>  Depth to saturated zone<br>  Slope | <br> <br> <br> 1.00<br> 0.37 | <br> <br> Very limited<br>  Depth to saturated zone<br>  Slope<br> | <br> <br> <br> 1.00<br> 0.37 | <br> <br> Very limited<br>  Slope<br>  Depth to saturated zone<br> | <br> <br> 1.00<br> 1.00 |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name                    | Pct. of                     | <br>  Dwellings without basem<br>  (Standard criteria)               | nents                            | Dwellings with baseme<br>  (Standard criteria)                              | nts                              | <br>  Small commercial buildings<br>  (Standard criteria)                                   |                                  |
|---------------------------------------------|-----------------------------|----------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------|----------------------------------|
|                                             | map<br> unit<br> <br>       | Rating class and limiting features                                   | Value<br> <br> <br>              | Rating class and limiting features                                          | Value<br> <br> <br>              | Rating class and limiting features                                                          | Value<br> <br>                   |
| 636:<br>Nikolai                             | <br> <br>  90<br> <br> <br> | Depth to saturated zone                                              | <br> <br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone              | <br> <br> <br> 1.00<br> 1.00     | <br>  Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | <br> <br> 1.00<br> 1.00<br> 1.00 |
| 637:<br>Nikolai, somewhat<br>poorly drained | <br> <br>  60<br> <br> <br> | •                                                                    | <br> <br> 1.00<br> 1.00<br> 0.28 | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>          | <br> <br> 1.00<br> 1.00<br>      | <br> Very limited<br>  Subsidence<br>  Organic matter content<br>  Depth to saturated zone  | <br> <br> 1.00<br> 1.00<br> 0.28 |
| Tuxedni                                     | <br>  25<br>                | <br> Somewhat limited<br>  Depth to saturated zone                   | <br> <br> 0.44                   | <br> Very limited<br>  Depth to saturated zone                              | <br> <br> 1.00                   | <br> Somewhat limited<br>  Depth to saturated zone                                          | <br> <br> 0.44                   |
| 638:<br>Puntilla                            | <br> <br>  80<br>           | <br> Somewhat limited<br>  Slope                                     | <br> <br> <br> 0.01              | <br> Somewhat limited<br>  Slope                                            | <br> <br> <br> 0.01              | <br> Very limited<br>  Slope                                                                | 1.00                             |
| 639:<br>Puntilla                            | <br> <br>  85<br>           | <br> <br> Very limited<br>  Slope                                    | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope                                           | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope                                                           | <br> <br> <br> 1.00              |
| 640:<br>Qutal                               | <br>  77<br> <br>           | <br> Somewhat limited<br>  Shrink-swell<br>  Depth to saturated zone | <br> <br> 0.50<br> 0.39          | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> 1.00<br> 0.50          | <br> Somewhat limited<br>  Shrink-swell<br>  Depth to saturated zone                        | <br> <br> 0.50<br> 0.39          |
| 641:<br>Qutal                               | <br> <br>  80<br> <br> <br> | <br> Somewhat limited<br>  Shrink-swell<br>  Depth to saturated zone | <br> <br> <br> 0.50<br> 0.39     | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> <br> 1.00<br> 0.50     | <br> Somewhat limited<br>  Slope<br>  Shrink-swell<br>  Depth to saturated zone             | <br> <br> 0.50<br> 0.50<br> 0.39 |
| 642:<br>Qutal                               | <br> <br>  80<br> <br> <br> | Depth to saturated zone                                              | <br> <br> 0.50<br> 0.39<br> 0.37 | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell<br>  Slope | <br> <br> 1.00<br> 0.50<br> 0.37 | <br> Very limited<br>  Slope<br>  Shrink-swell<br>  Depth to saturated zone                 | <br> <br> 1.00<br> 0.50<br> 0.39 |
| 643:<br>Redoubt, terraces                   | <br> <br>  85<br>           | <br> <br> Not limited<br>                                            | <br> <br> <br>                   | <br> <br> Not limited<br>                                                   | <br> <br> <br>                   | <br> <br> Not limited<br>                                                                   |                                  |
| 644:<br>Redoubt                             | <br>  85<br>                | <br> Somewhat limited<br>  Slope                                     | <br> <br> 0.16                   | <br> Somewhat limited<br>  Slope                                            | <br> <br> 0.16                   | <br> Very limited<br>  Slope                                                                | 1.00                             |
| 645:<br>Redoubt                             | <br> <br>  85<br>           | <br> <br> Very limited<br>  Slope                                    | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope                                           | <br> <br> <br> 1.00              | <br> <br> Very limited<br>  Slope                                                           | 1.00                             |
| 646:<br>Redoubt, cool                       | <br> <br>  80<br>           | <br> <br> Not limited<br>                                            | <br> <br> <br>                   | <br> <br> Not limited<br>                                                   | <br> <br> <br>                   | <br> <br> Not limited<br>                                                                   |                                  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name             | Pct. of Imap                | (Standard criteria)                                               | nents                    | <br>  Dwellings with baseme<br>  (Standard criteria)                                           | nts                                       | Small commercial buildings<br>  (Standard criteria)                                                                   |                                           |  |
|--------------------------------------|-----------------------------|-------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|
|                                      | map<br> unit<br> <br>       |                                                                   | Value<br> <br>           | Rating class and limiting features                                                             | Value<br> <br>                            | Rating class and limiting features                                                                                    | Value<br> <br>                            |  |
| 647:<br>Redoubt, moderately<br>steep | <br> <br> <br>  45          | <br> <br> <br> Very limited<br>  Slope                            | <br> <br> <br> <br> 1.00 | <br> <br> <br> Very limited<br>  Slope                                                         | <br> <br> <br> <br> 1.00                  | <br> <br> <br> Very limited<br>  Slope                                                                                | <br> <br> <br> 1.00                       |  |
| Redoubt, gently sloping              | <br> <br>  40<br>           | <br> <br> Not limited<br>                                         | <br> <br> <br>           | <br> <br> Not limited<br>                                                                      | <br> <br> <br>                            | <br> <br> Somewhat limited<br>  Slope                                                                                 | 0.50                                      |  |
| 648:<br>Redoubt, cool                | <br> <br>  55<br>           | <br> <br> Somewhat limited<br>  Slope                             | <br> <br> <br> 0.04      | <br> <br> Somewhat limited<br>  Slope                                                          | <br> <br> <br> 0.04                       | <br> <br> Very limited<br>  Slope                                                                                     | 1.00                                      |  |
| Tuxedni                              | <br>  35<br> <br>           | Somewhat limited<br>  Depth to saturated zone<br>  Slope          | •                        | <br> Very limited<br>  Depth to saturated zone<br>  Slope                                      | <br> <br> 1.00<br> 0.04                   | <br> Very limited<br>  Slope<br>  Depth to saturated zone                                                             | <br> 1.00<br> 0.44                        |  |
| 649:<br>Riverwash                    | 1 100                       | <br> <br> Not rated<br>                                           | <br> <br> <br>           | <br> <br> Not rated<br>                                                                        | <br> <br> <br>                            | <br> <br> Not rated<br>                                                                                               | <br> <br> <br>                            |  |
| 650:<br>Salamatof                    | <br>  70<br> <br> <br>      | Ponding                                                           | 1.00<br> 1.00<br> 1.00   | , .                                                                                            |                                           | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content               |                                           |  |
| Doroshin                             | <br>  22<br> <br>           |                                                                   | 1.00<br> 1.00            | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>                             | 1.00                                      | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content                            |                                           |  |
| 651:<br>Salamatof                    | <br> <br>  80<br> <br> <br> |                                                                   | 1.00<br> 1.00<br> 1.00   | , .                                                                                            | 1.00<br> 1.00                             | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content               |                                           |  |
| 652:<br>Slikok                       | <br> <br>  85<br> <br> <br> | Flooding<br>  Depth to saturated zone                             | 1.00<br> 1.00            | <br> Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Subsidence      | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Organic matter content<br>  Subsidence | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |  |
| 653:<br>Slikok                       | <br> <br>  82<br> <br> <br> | Flooding<br>  Depth to saturated zone<br>  Organic matter content |                          | <br> <br> Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Subsidence | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Organic matter content<br>  Subsidence | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |  |
| 654:<br>Smithfha                     | <br> <br>  85<br>           | <br> <br> Not limited<br> <br>                                    | <br> <br> <br> <br>      | <br> Not limited<br>                                                                           | <br> <br> <br> <br>                       | <br> <br> Somewhat limited<br>  Slope<br>                                                                             | <br> <br> <br> 0.50                       |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name              | Pct.                  | (Standard criteria)                            | nents                    | Dwellings with baseme (Standard criteria)                 | nts                      | Small commercial buildings<br>  (Standard criteria)       |                          |  |
|---------------------------------------|-----------------------|------------------------------------------------|--------------------------|-----------------------------------------------------------|--------------------------|-----------------------------------------------------------|--------------------------|--|
|                                       | map<br> unit<br> <br> |                                                | Value<br> <br>           | Rating class and limiting features                        | Value<br> <br>           | Rating class and Illimiting features                      | Value<br> <br>           |  |
| 655:<br>Smithfha                      | <br> <br>  90<br>     |                                                | <br> <br> <br> 1.00      | <br> <br> Very limited<br>  Slope<br>                     | <br> <br> <br> 1.00      | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00      |  |
| 656:<br>Smokey Bay                    | <br>  77<br>          | <br> Very limited<br>  Depth to saturated zone |                          | <br> <br> Very limited<br>  Depth to saturated zone       |                          | <br> Very limited<br>  Depth to saturated zone            | <br> <br> 1.00           |  |
| 657:<br>Smokey Bay                    | <br>  77<br>          | Depth to saturated zone                        |                          | <br> Very limited<br>  Depth to saturated zone<br>  Slope |                          | <br> Very limited<br>  Slope<br>  Depth to saturated zone | <br> <br> 1.00<br> 1.00  |  |
| 658:<br>Snowdance                     | <br>  90<br>          | <br>                                           |                          | <br> <br> Very limited<br>  Depth to saturated zone       |                          | <br> <br> Very limited<br>  Depth to saturated zone       | <br> <br> <br> 1.00      |  |
| 659:<br>Soldotna                      | 90                    | <br> Not limited                               |                          | <br> <br> Not limited                                     | <br>                     | <br> Not limited                                          |                          |  |
| 660:<br>Soldotna                      | <br> <br>  90<br>     | <br> <br> Not limited<br>                      | <br> <br> <br>           | <br> <br> Not limited<br>                                 | <br> <br> <br>           | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> 0.50      |  |
| 661:<br>Soldotna                      | <br> <br>  85<br>     | <br> <br> Somewhat limited<br>  Slope          | <br> <br> <br> 0.63      | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> 0.63      | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00      |  |
| 662:<br>Soldotna                      | <br> <br>  85<br>     |                                                | <br> <br> <br> 1.00      | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00      | <br> Very limited<br>  Slope                              | <br> <br> <br> 1.00      |  |
| 663:<br>Soldotna, sandy<br>substratum | <br> <br>   80<br>    | <br> <br> <br> Not limited<br>                 | <br> <br> <br> <br>      | <br> <br> Not limited<br>                                 | <br> <br> <br> <br> <br> | <br> <br> Somewhat limited<br> Slope                      | <br> <br> <br> <br> 0.50 |  |
| 664:<br>Soldotna, sandy<br>substratum | <br> <br>  <br>  75   | <br> <br> -<br> Somewhat limited<br>  Slope    | <br> <br> <br> <br> 0.37 | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> <br> 0.37 | <br> <br> <br> Very limited<br>  Slope                    | <br> <br> <br> 1.00      |  |
| 665:<br>Soldotna, sandy<br>substratum | <br> <br>   80<br>    | <br> -<br> Very limited<br>  Slope             | <br> <br> <br> 1.00      | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> 1.00      | <br> -<br> Very limited<br>  Slope                        | <br> <br> <br> 1.00      |  |
| 666:<br>Soldotna, sandy<br>substratum | <br> <br> -<br> 80    | <br> <br> Not limited                          | <br> <br> <br>           | <br> <br> <br> Not limited                                | <br> <br> <br>           | <br> <br> <br> Not limited                                | <br> <br> <br>           |  |
| 667:<br>Soldotna, strongly<br>sloping | <br> <br> -<br>  45   | <br> <br> Somewhat limited<br>  Slope          | <br> <br> <br> <br> 0.16 | <br> <br> Somewhat limited<br>  Slope                     | <br> <br> <br> <br> 0.16 | <br> <br> Very limited<br>  Slope                         | <br> <br> <br> <br> 1.00 |  |
| Soldotna, gently sloping              | <br> <br> -<br>  40   | <br> <br> Not limited<br>                      | <br> <br> <br>           | <br> <br> Not limited<br>                                 | <br> <br> <br>           | <br> <br> Not limited<br>                                 |                          |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name              | . , , , , , , , , , , , , , , , , , , , |                                                                                       | Dwellings with baseme (Standard criteria) | nts                                                                         | Small commercial buildings<br>(Standard criteria) |                                                                                       |                                  |
|---------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------|
|                                       | map<br> unit<br> <br>                   | Rating class and limiting features                                                    | Value<br> <br>                            | Rating class and limiting features                                          | Value<br> <br>                                    | Rating class and Illimiting features                                                  | Value<br> <br>                   |
| 668:<br>Soldotna, sandy<br>substratum | <br> <br> <br>  55                      |                                                                                       | •                                         | <br> <br> <br> Very limited                                                 | •                                                 | <br> <br> <br> Very limited                                                           |                                  |
| Kenai                                 | <br> <br>  40<br>                       | Slope<br> <br> Very limited<br>  Slope                                                | 1.00<br> <br> <br> <br> 1.00              | Slope<br> <br> Very limited<br>  Slope                                      | 1.00<br> <br> <br> <br> 1.00                      | Slope<br> <br> Very limited<br>  Slope                                                | 1.00<br> <br> <br> 1.00          |
| 669:                                  | <br>                                    | Shrink-swell<br> <br>                                                                 | 0.50<br> <br>                             | Shrink-swell<br> <br>                                                       | 0.50<br> <br>                                     | Shrink-swell<br> <br>                                                                 | 0.50<br> <br>                    |
| Soldotna, sandy substratum            | <br>  55<br>                            | <br> Not limited<br>                                                                  | <br> <br> <br>                            | <br> Not limited<br>                                                        | <br> <br> <br>                                    | <br> Somewhat limited<br>  Slope                                                      | <br> <br> 0.50                   |
| Kenai                                 | 40<br> <br>                             | <br> Somewhat limited<br>  Shrink-swell<br>                                           | <br> 0.50<br>                             | <br> Somewhat limited<br>  Shrink-swell<br> <br>                            | <br> 0.50<br>                                     | <br> Somewhat limited<br>  Slope<br>  Shrink-swell<br>                                | <br> 0.50<br> 0.50               |
| 670:<br>Soldotna                      | <br>  50<br>                            | <br> Somewhat limited<br>  Slope                                                      | <br> <br> 0.63                            | <br> Somewhat limited<br>  Slope                                            | <br> <br> 0.63                                    | <br> Very limited<br>  Slope                                                          | <br> <br> 1.00                   |
| Kichatna                              | 40<br>                                  | <br> Somewhat limited<br>  Slope<br>                                                  | <br> <br> 0.63<br>                        | Somewhat limited<br>  Slope<br>                                             | <br> <br> 0.63<br>                                | <br> Very limited<br>  Slope<br>                                                      | 1.00                             |
| 671:<br>Soldotna                      | 50<br>                                  | <br> Very limited<br>  Slope                                                          | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                                | <br> <br> 1.00                                    | <br> Very limited<br>  Slope                                                          | <br> <br> 1.00                   |
| Kichatna                              | 40<br>                                  | <br> Very limited<br>  Slope<br>                                                      | <br> <br> 1.00<br>                        | <br> Very limited<br>  Slope<br>                                            | <br> <br> 1.00<br>                                | <br> Very limited<br>  Slope<br>                                                      | <br> <br> 1.00                   |
| 672:<br>Soldotna                      | i                                       | <br> Not limited<br>                                                                  | <br> <br>                                 | <br> Not limited<br>                                                        | <br> <br>                                         | <br> Not limited<br>                                                                  | j<br> <br>                       |
| Nikolai                               | 45<br> <br> <br>                        | Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | 1.00<br> 1.00                             | Very limited<br>  Subsidence<br>  Depth to saturated zone<br>               | 1.00                                              | Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content |                                  |
| 673:<br>Spenard                       | 89<br> <br>                             | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell                      | <br> <br> 1.00<br> 0.50                   | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> 1.00<br> 0.50                           | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell                      | <br> 1.00<br> 0.50               |
| 674:<br>Spenard                       | <br> 67<br> <br>                        | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell<br>                  | •                                         | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell            | <br> <br> 1.00<br> 0.50                           | <br> Very limited<br>  Depth to saturated zone<br>  Slope<br>  Shrink-swell           | <br> 1.00<br> 0.50<br> 0.50      |
| 675:<br>Spenard                       | <br>  87<br> <br>                       | Very limited   Depth to saturated zone   Slope   Shrink-swell                         | <br> <br> 1.00<br> 0.63<br> 0.50          | <br> Very limited<br>  Depth to saturated zone<br>  Slope<br>  Shrink-swell | <br> <br> <br> 1.00<br> 0.63<br> 0.50             | <br> Very limited<br>  Slope<br>  Depth to saturated zone<br>  Shrink-swell           | <br> <br> 1.00<br> 1.00<br> 0.50 |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name     |                                  |                                                                                            | Dwellings with baseme (Standard criteria) | nts                                                                                                     | Small commercial buildings<br>  (Standard criteria) |                                                                                                                  |                                               |
|------------------------------|----------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|                              | map<br> unit<br> <br>            |                                                                                            | Value<br> <br>                            | Rating class and limiting features                                                                      | Value<br> <br>                                      | Rating class and limiting features                                                                               | Value<br> <br>                                |
| 676:<br>Starichkof           | <br> <br>  60<br> <br> <br>      |                                                                                            | 1.00<br> 1.00<br> 1.00                    |                                                                                                         | 1.00<br> 1.00<br> 1.00                              | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content          | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00     |
| Doroshin                     | <br>  35<br> <br> <br> <br>      | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | 1.00<br> 1.00                             | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>                                      | 1.00                                                | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Depth to saturated zone<br>  I               | <br> <br> 1.00<br> 1.00<br> 1.00              |
| 677:<br>Starichkof           | <br>  75<br> <br> <br> <br> <br> |                                                                                            | 1.00<br> 1.00<br> 1.00                    | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | 1.00<br> 1.00<br> 1.00                              | Depth to saturated zone                                                                                          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| 678:<br>Starichkof           | <br>  82<br> <br> <br> <br>      |                                                                                            | 1.00<br> 1.00<br> 1.00                    |                                                                                                         | 1.00<br> 1.00<br> 1.00                              | Depth to saturated zone                                                                                          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.12 |
| 679:<br>Starichkof, forested | <br>  85<br> <br> <br> <br> <br> |                                                                                            | 1.00<br> 1.00<br> 1.00                    | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | 1.00<br> 1.00<br> 1.00                              | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content          | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00     |
| 680:<br>Starichkof           | <br>  45<br> <br> <br> <br>      |                                                                                            | 1.00<br> 1.00<br> 1.00                    |                                                                                                         | 1.00<br> 1.00<br> 1.00                              | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content          |                                               |
| Slikok                       | <br>  30<br> <br> <br> <br> <br> | Flooding<br>  Depth to saturated zone<br>  Organic matter content                          | 1.00<br> 1.00                             | Depth to saturated zone Subsidence                                                                      | 1.00<br> 1.00                                       | <br> Very limited<br>  Ponding<br>  Flooding<br>  Depth to saturated zone<br>  Organic matter content<br>  Slope | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00 |
| Naptowne                     | <br>  25<br> <br>                | <br> Not limited<br> <br>                                                                  | <br> <br> <br>                            | <br> Not limited<br> <br>                                                                               | <br> <br> <br>                                      | <br> Somewhat limited<br>  Slope<br>                                                                             | <br> <br> 0.12<br>                            |

Table 18. Building Site Development: Structures—Continued

| Map symbol   Pct.   Dwellings without basem and soil name   of   (Standard criteria) |                                   | nents                                                    | Dwellings with basements (Standard criteria)   |                                                                  | Small commercial buildings<br>  (Standard criteria) |                                                                                                                   |                                                |
|--------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|                                                                                      | map<br> unit<br> <br>             |                                                          | Value<br> <br>                                 | Rating class and limiting features                               | Value<br> <br>                                      | Rating class and limiting features                                                                                | Value                                          |
| 681:<br>Starichkof                                                                   | <br> -<br>  50<br> <br> <br> <br> | Subsidence Depth to saturated zone                       | <br> <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 | Subsidence Depth to saturated zone                               | <br> <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00      | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to<br>  saturated zone<br>  Organic matter<br>  content | <br> <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 |
| Spenard                                                                              | <br>- 42<br>                      | Depth to saturated zone                                  |                                                | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell |                                                     | <br> Very limited<br>  Depth to saturated zone<br>  Shrink-swell                                                  | <br> 1.00<br> 0.50                             |
| 682:<br>Susitna                                                                      | <br>- 85<br>                      | <br> Very limited<br>  Flooding                          | <br> <br> <br> 1.00                            | l<br> <br> Very limited<br>  Flooding                            |                                                     | <br> Very limited<br>  Flooding                                                                                   | <br> <br> <br> 1.00                            |
| Riverwash                                                                            | -   5                             | <br> Not rated                                           |                                                | ।<br> Not rated<br>।                                             |                                                     | <br> Not rated                                                                                                    |                                                |
| 683:<br>Susitna                                                                      | <br> -<br>  85<br> <br>           | <br> Very limited<br>  Flooding<br>                      | <br> <br> <br> 1.00<br>                        | <br> Very limited<br>  Flooding<br>                              | <br> <br> <br> 1.00                                 | <br> Very limited<br>  Flooding<br>  Slope                                                                        | <br> <br> 1.00<br> 0.50                        |
| 684:<br>Talkeetna                                                                    | <br>- 94                          | <br> <br> Not limited<br>                                | <br> <br> <br>                                 | I<br> <br> Not limited<br>                                       | <br> <br> <br>                                      | <br> <br> Not limited<br>                                                                                         | <br> <br> <br>                                 |
| 685:<br>Talkeetna                                                                    | <br>- 90<br>                      | <br> Very limited<br>  Slope                             | <br> <br> 1.00                                 | <br> Very limited<br>  Slope                                     | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                                                                      | <br> <br> 1.00                                 |
| 686:<br>Talkeetna                                                                    | <br>- 55<br>                      | <br> Very limited<br>  Slope                             | <br> <br> <br> 1.00                            | <br> Very limited<br>  Slope                                     | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                                                                      | 1.00                                           |
| Starichkof                                                                           | -   40<br> <br> <br> <br>         | Ponding                                                  | 1.00<br> 1.00<br> 1.00                         |                                                                  | 1.00<br> 1.00<br> 1.00                              | <br> Very limited<br>  Ponding<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content           |                                                |
| 687:<br>Tangerra                                                                     | <br>- 80<br>                      | <br> Very limited<br>  Depth to saturated zone           |                                                | <br> Very limited<br>  Depth to saturated zone                   | <br> <br> 1.00                                      | <br> Very limited<br>  Depth to saturated zone                                                                    | 1.00                                           |
| 688:<br>Beaches, tidal flats                                                         | -   90                            | <br> <br> Not rated                                      | <br> <br> <br>                                 | <br> <br> Not rated<br>                                          | <br> <br>                                           | <br> <br> Not rated<br>                                                                                           |                                                |
| 689:<br>Tlikakila                                                                    | <br>- 90<br>                      | <br> -<br> Somewhat limited<br>  Depth to saturated zone | <br> <br> <br> 1.00                            | <br> -<br> Very limited<br>  Depth to saturated zone<br>         | <br> <br> <br> 1.00                                 | <br> -<br> Somewhat limited<br>  Depth to saturated zone                                                          | 0.93                                           |
| 690:<br>Tlikakila                                                                    | <br>- 87<br> <br>                 | <br> Somewhat limited<br>  Depth to saturated zone<br>   |                                                | <br> Very limited<br>  Depth to saturated zone<br>               | <br> <br> 1.00<br>                                  | <br> Somewhat limited<br>  Depth to saturated zone<br>  Slope<br>                                                 | <br> 0.93<br> 0.50                             |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name | Pct.   Dwellings without basements   of   (Standard criteria) |                                                                   |                              | Dwellings with baseme (Standard criteria)                               | nts                          | Small commercial buildings<br>  (Standard criteria)              |                              |  |
|--------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------|------------------------------|--|
|                          | map<br> unit<br> <br>                                         |                                                                   | Value<br> <br>               | Rating class and limiting features                                      | Value<br> <br>               | Rating class and Ilmiting features                               | Value                        |  |
| 691:<br>Tlikakila        | <br> -<br>  85<br> <br> <br>                                  | <br> Somewhat limited<br>  Depth to saturated zone<br>  Slope<br> | <br> <br> <br> 0.93<br> 0.63 | <br> <br> Very limited<br>  Depth to saturated zone<br>  Slope<br>      |                              | <br> Very limited<br>  Slope<br>  Depth to<br>  saturated zone   | <br> <br> 1.00<br> 0.93      |  |
| 692:<br>Tokositna        | <br>-   85                                                    | <br> <br> Not limited                                             | <br> <br>                    | <br> <br> Not limited<br>                                               | <br> <br>                    | <br> <br> Not limited                                            |                              |  |
| 693:<br>Tokositna        | <br> -   90<br>                                               | <br> Not limited<br>                                              | <br> <br> <br>               | <br> Not limited<br>                                                    | <br> <br> <br>               | <br> Somewhat limited<br>  Slope                                 | 0.50                         |  |
| 694:<br>Tokositna        | -   90<br>                                                    | <br> Somewhat limited<br>  Slope                                  | <br> <br> <br> 0.16          | <br> Somewhat limited<br>  Slope                                        | <br> <br> <br> 0.16          | <br> Very limited<br>  Slope                                     | 1.00                         |  |
| 695:<br>Truuli           | <br> - 88<br>                                                 | <br> Very limited<br>  Depth to saturated zone                    |                              | <br> Very limited<br>  Depth to saturated zone                          |                              | <br> Very limited<br>  Depth to saturated zone                   | <br> <br> <br> 1.00          |  |
| 696:<br>Tutka            | <br> - 45<br>                                                 | Slope                                                             | <br> <br> <br> 1.00<br> 0.99 | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock            | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock     | <br> <br> 1.00<br> 0.99      |  |
| Kasitsna                 | <br>- 40<br>                                                  | <br> Very limited<br>  Slope                                      | <br> <br> 1.00               | <br> Very limited<br>  Slope                                            |                              | <br> Very limited<br>  Slope                                     | <br> <br> 1.00               |  |
| Rock outcrop             | <br>-   15                                                    | <br> Not rated                                                    | <br>                         | <br> Not rated                                                          | <br>                         | <br> Not rated                                                   |                              |  |
| 697:<br>Tutka            | <br> -<br>  55<br>                                            |                                                                   | <br> <br> <br> 1.00<br> 0.99 |                                                                         | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited<br>  Slope<br>  Depth to hard bedrock     | <br> <br> <br> 1.00<br> 0.99 |  |
| Portgraham               | <br>- 30<br>                                                  | Slope                                                             | <br> <br> 1.00<br> 0.71      | <br> Very limited<br>  Slope<br>  Depth to hard bedrock                 | <br> <br> 1.00<br> 1.00      | <br> Very limited<br>  Slope<br>  Depth to hard bedrock          | <br> <br> 1.00<br> 0.71      |  |
| 698:<br>Tuxedni          | <br> -<br>  85<br>                                            | <br> Somewhat limited<br>  Depth to saturated zone                | <br> <br> <br> 0.44          | <br> Very limited<br>  Depth to saturated zone                          | <br> <br> <br> 1.00          | <br> Somewhat limited<br>  Depth to saturated zone               | <br> <br> <br> 0.44          |  |
| 699:<br>Tuxedni          | <br> - 85<br>                                                 | <br> Somewhat limited<br>  Slope<br>  Depth to saturated zone     | 0.63                         | <br> Very limited<br>  Depth to saturated zone<br>  Slope               | <br> <br> 1.00<br> 0.63      | <br> Very limited<br>  Slope<br>  Depth to saturated zone        | <br> <br> 1.00<br> 0.44      |  |
| 700:<br>Tuxedni, warm    | <br> -   85<br>                                               | <br> Somewhat limited<br>  Depth to saturated zone                | <br> <br> <br> 0.44          | <br> -<br> Very limited<br>  Depth to saturated zone                    | <br> <br> <br> 1.00          | <br> Somewhat limited<br>  Depth to saturated zone               | <br> <br> <br> 0.44          |  |
| 701:<br>Typic Cryaquents | <br> -   95<br> <br>                                          | <br> Very limited<br>  Flooding<br>  Depth to saturated zone      | <br> <br> 1.00<br> 1.00      | <br>   <br> Very limited<br>  Flooding<br>  Depth to saturated zone<br> | <br> <br> 1.00<br> 1.00      | <br> Very limited<br>  Flooding<br>  Depth to saturated zone<br> | <br> <br> 1.00<br> 1.00      |  |

Table 18. Building Site Development: Structures—Continued

| Map symbol and soil name    |                         |                                                                        | Dwellings with baseme (Standard criteria) | nts                                                                | Small commercial buildings<br>  (Standard criteria) |                                                                                            |                     |
|-----------------------------|-------------------------|------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------|
|                             | linap<br> unit<br> <br> | Rating class and limiting features                                     | Value<br> <br>                            | Rating class and limiting features                                 | Value<br> <br>                                      | Rating class and limiting features                                                         | Value               |
| 702:<br>Typic Cryopsamments | <br> <br>  84<br>       | <br> <br> Very limited<br>  Slope<br>                                  | <br> <br> <br> 1.00                       | <br> <br> Very limited<br>  Slope<br>                              | <br> <br> <br> 1.00                                 | <br> <br> Very limited<br>  Slope<br>                                                      | <br> <br> <br> 1.00 |
| 703:<br>Typic Cryorthents   | <br>  80<br>            | <br> Very limited<br>  Slope                                           |                                           | <br> Very limited<br>  Slope                                       | <br> <br> 1.00                                      | <br> Very limited<br>  Slope                                                               | <br> <br> 1.00      |
| 704:<br>Urban land          | <br> <br>  85<br>       | <br> <br> Not rated<br>                                                |                                           | <br> <br> Not rated<br>                                            | <br> <br> <br>                                      | <br> <br> Not rated<br>                                                                    |                     |
| 705:<br>Water, fresh        | <br> 100<br>            | <br> <br> Not rated<br>                                                |                                           | <br> <br> Not rated<br>                                            | <br> <br>                                           | <br> <br> Not rated<br>                                                                    | <br> <br>           |
| 706:<br>Whitsol             | <br>  90<br>            | <br> <br> Not limited<br>                                              |                                           | <br> <br> Not limited<br>                                          | <br> <br>                                           | <br> <br> Not limited<br>                                                                  | <br> <br>           |
| 707:<br>Whitsol             | <br>  90<br>            | <br> Not limited<br>                                                   |                                           | <br> Not limited<br>                                               | <br> <br> <br>                                      | <br> Somewhat limited<br>  Slope                                                           | 0.50                |
| 708:<br>Whitsol             | <br> <br>  85<br>       | <br> Somewhat limited<br>  Slope                                       | 0.63                                      | <br> Somewhat limited<br>  Slope                                   | <br> <br> <br> 0.63                                 | <br> Very limited<br>  Slope                                                               | 1.00                |
| 709:<br>Whitsol             | <br> <br>  85<br>       | <br> Very limited<br>  Slope                                           | <br> <br> 1.00                            | <br> Very limited<br>  Slope                                       | <br> <br> <br> 1.00                                 | <br> Very limited<br>  Slope                                                               | 1.00                |
| 710:<br>Whitsol             | <br> <br>  85<br>       | <br> <br> Very limited<br>  Slope                                      | 1.00                                      | <br> <br> Very limited<br>  Slope                                  | <br> <br> <br> 1.00                                 | <br> <br> Very limited<br>  Slope                                                          | 1.00                |
| 711:<br>Whitsol             | <br> <br>  55<br>       | <br> <br> Not limited<br>                                              | <br> <br> <br>                            | <br> <br> Not limited<br>                                          | <br> <br> <br>                                      | <br> <br> Somewhat limited<br>  Slope                                                      | <br> <br> <br> 0.12 |
| Doroshin                    | <br>  30<br> <br> <br>  | Very limited Subsidence Depth to saturated zone Organic matter content | 1.00<br> 1.00                             | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br> | 1.00                                                | <br> Very limited<br>  Subsidence<br>  Depth to saturated zone<br>  Organic matter content | •                   |

## Table 19. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name         | <br>  Percent<br>  of       | <br>  Shallow excavations<br>  (Standard criteria)                               |                                  |  |
|----------------------------------|-----------------------------|----------------------------------------------------------------------------------|----------------------------------|--|
|                                  | map<br>  unit<br>           | Rating class and limiting features                                               | Value                            |  |
| 501:<br>Aquic Cryofluvents       | <br> <br>  85<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding | <br> <br> 1.00<br> 1.00<br> 0.60 |  |
| 502: Aquic Cryofluvents, shallow | <br>  80<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding | <br> <br> 1.00<br> 1.00<br> 0.60 |  |
| 503:<br>Badland, sea cliffs      | <br> <br> 100<br>           | <br> <br> Not rated<br>                                                          | <br> <br> <br>                   |  |
| 504:<br>Badland, sea cliffs      | <br>  55                    | <br> Not rated                                                                   | į<br>Į                           |  |
| Typic Cryorthents                | <br> 45<br> <br>            | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                 | <br> <br> 1.00<br> 1.00          |  |
| 505:<br>Beaches                  | <br> <br>  90               | <br> <br> Not rated                                                              |                                  |  |
| 506:<br>Beluga                   | <br>  85<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave               | <br> <br> 1.00<br> 0.10          |  |
| 507:<br>Beluga                   | <br>  87<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave               | <br> <br> 1.00<br> 0.10          |  |
| 508:<br>Beluga                   | <br>  87<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave    | <br> <br> 1.00<br> 0.16<br> 0.10 |  |
| 509:<br>Beluga                   | <br> <br>  55<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave               | <br> <br> 1.00<br> 0.10          |  |
| Mutnala                          | <br>  40<br>                | <br> Very limited:<br>  Cutbanks cave<br>                                        | <br> <br> 1.00<br>               |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name        | Percent of             | <br>  Shallow excavations<br>  (Standard criteria)                            |                             |  |
|---------------------------------|------------------------|-------------------------------------------------------------------------------|-----------------------------|--|
|                                 | map<br>  unit<br> <br> | Rating class and I limiting features                                          | Value<br> <br>              |  |
| 510:<br>Beluga                  | <br> <br>  60<br>      | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave       | <br> <br> 1.00<br> 0.10     |  |
| Smokey Bay                      | 37                     | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>        | <br> 1.00<br> 0.10          |  |
| 511:<br>Beluga                  | <br>  50<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave | <br> 1.00<br> 0.16<br> 0.10 |  |
| Smokey Bay                      | <br>  47<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave | <br> 1.00<br> 0.63<br> 0.10 |  |
| 512:<br>Benka                   | <br>  86<br>           | <br> Very limited:<br>  Cutbanks cave                                         | <br> <br> 1.00              |  |
| 513:<br>Benka                   | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave<br>                                     | <br> <br> 1.00              |  |
| 514:<br>Benka                   | <br>  85<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                              | <br> <br> 1.00<br> 0.37     |  |
| 515:<br>Benka                   | 90                     | <br> Very limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 1.00<br> 1.00     |  |
| 516:<br>Benka                   | <br>  95<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 1.00<br> 1.00     |  |
| 517:<br>Benka, strongly sloping | <br>  45<br>           | <br> Very limited:<br>  Cutbanks cave<br>  Slope                              | <br> <br> 1.00<br> 0.63     |  |
| Benka, gently sloping           | <br>  40<br>           | <br> Very limited:<br>  Cutbanks cave<br>                                     | 1.00                        |  |
| 518:<br>Boxcar                  | <br>  75<br>           | <br> Very limited:<br>  Cutbanks cave<br>                                     | <br> <br> 1.00              |  |
| 519:<br>Boxcar                  | <br>  80<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                          | <br> <br> 1.00<br> 1.00<br> |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name              | Percent of             | Shallow excavations<br>  (Standard criteria)                           |                          |  |
|---------------------------------------|------------------------|------------------------------------------------------------------------|--------------------------|--|
|                                       | map<br>  unit<br> <br> | Rating class and limiting features                                     | Value<br> <br>           |  |
| 520:<br>Boxcar                        | <br> <br>  85<br> <br> | <br> <br> Very limited:<br>  Slope<br>  Cutbanks cave                  | <br> <br> 1.00<br> 1.00  |  |
| 521:<br>Boxcar, cool                  | <br>  80<br>           | <br> Very limited:<br>  Cutbanks cave                                  | 1.00                     |  |
| 522:<br>Boxcar, cool                  | <br>  80<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                   | <br> <br> 1.00<br> 1.00  |  |
| 523:<br>Chenega                       | <br>  85<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Flooding                    | <br> 1.00<br> 0.80       |  |
| 524:<br>Chenega, cool                 | <br>  90<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Flooding                    | <br> <br> 1.00<br> 0.80  |  |
| 525:<br>Chenega, occasionally flooded | <br>  85<br> <br> <br> | <br> Very limited:<br>  Cutbanks cave<br>  Flooding<br>                | <br> <br> 1.00<br> 0.60  |  |
| 526:<br>Chulitna                      | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave<br>                              | <br> <br> 1.00           |  |
| 527:<br>Chulitna                      | <br>  80<br>           | <br> Very limited:<br>  Cutbanks cave<br>                              | 1.00                     |  |
| 528:<br>Chulitna                      | <br>  85<br> <br> <br> | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                   | <br> <br> 1.00<br> 0.63  |  |
| 529:<br>Chulitna                      | <br>  85<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                   | <br> <br> 1.00<br> 1.00  |  |
| 530:<br>Chunilna                      | <br>  92<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br> | <br> <br> 1.00<br> 1.00  |  |
| 531:<br>Chunilna                      | <br>  82<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br> | <br> -<br> 1.00<br> 1.00 |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | Percent of                     | <br>  Shallow excavations<br>  (Standard criteria)                            |                                               |  |
|--------------------------|--------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------|--|
|                          | map<br>  unit<br> <br>_        | Rating class and limiting features                                            | Value<br> <br>                                |  |
| 532:<br>Chunilna, cool   | <br> <br>    80<br>            | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave            | <br> <br> 1.00<br> 1.00                       |  |
| 533:<br>Chunilna, cool   | <br> -   85<br> <br>           | Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope      | <br> 1.00<br> 1.00<br> 0.16                   |  |
| 534:<br>Clam Gulch       | <br>    85<br>                 | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave            | <br> <br> 1.00<br> 0.10                       |  |
| 535:<br>Clunie           | <br> -   90<br> <br> <br> <br> |                                                                               | <br> 1.00<br> 1.00<br> 1.00<br> 0.80<br> 0.10 |  |
| 536:<br>Coal Creek       | <br>    75<br>                 | Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                 | <br> <br> 1.00<br> 1.00                       |  |
| 537:<br>Coal Creek       | -   88<br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave            | <br> <br> 1.00<br> 1.00                       |  |
| 538:<br>Coal Creek       | <br>-   88<br> <br> <br>       | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope | <br> 1.00<br> 1.00<br> 0.37                   |  |
| 539:<br>Cohoe            | <br> -   87<br>                | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                        | <br> <br> 1.00<br> 0.50                       |  |
| 540:<br>Cohoe            | <br> -   85<br>                | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                        | <br> <br> 1.00<br> 0.50                       |  |
| 541:<br>Cohoe            | <br> - 89<br> <br>             | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer<br>  Slope             | <br> <br> 1.00<br> 0.50<br> 0.37              |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | Percent of                  | <br>  Shallow excavations<br>  (Standard criteria)                     |                                  |  |
|--------------------------|-----------------------------|------------------------------------------------------------------------|----------------------------------|--|
|                          | map<br>  unit<br> <br>      | Rating class and limiting features                                     | Value                            |  |
| 542:<br>Cohoe            | <br> <br>  93<br> <br>      | <br> <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer | <br> <br> 1.00<br> 1.00<br> 0.50 |  |
| 543:<br>Cohoe            | <br>  80<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer      | <br> <br> 1.00<br> 1.00<br> 0.50 |  |
| 544:<br>Cohoe            | <br>  84<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer      | <br> 1.00<br> 1.00<br> 0.50      |  |
| 545:<br>Cohoe, dry       | <br>  87<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                 | <br> <br> 1.00<br> 0.50          |  |
| 546:<br>Cohoe, dry       | <br>  85<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                 | <br> 1.00<br> 0.50               |  |
| 547:<br>Cohoe, dry       | <br>  89<br> <br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer<br>  Slope      | <br> 1.00<br> 0.50<br> 0.37      |  |
| 548:<br>Cohoe, dry       | <br>  93<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer<br>  | <br> 1.00<br> 1.00<br> 0.50      |  |
| 549:<br>Cohoe, dry       | <br>  80<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer<br>  | <br> 1.00<br> 1.00<br> 0.50      |  |
| 550:<br>Cohoe, dry       | <br>  84<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer<br>  | <br> 1.00<br> 1.00<br> 0.50      |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name             | Percent                | <br>  Shallow excavations<br>  (Standard criteria)                                              |                                  |  |
|--------------------------------------|------------------------|-------------------------------------------------------------------------------------------------|----------------------------------|--|
|                                      | map<br>  unit<br>      | Rating class and limiting features                                                              | Value                            |  |
| 551:<br>Cohoe, moderately steep      | <br> 45<br>            | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>  Dense layer                               | <br> <br> 1.00<br> 1.00<br> 0.50 |  |
| Cohoe, gently sloping                | <br>  40<br>           | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                                          | <br> <br> 1.00<br> 0.50          |  |
| 552:<br>Cohoe, dry, moderately steep | <br>  45<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>  Dense layer                               | <br> 1.00<br> 1.00<br> 0.50      |  |
| Cohoe, dry, gently sloping           | <br>  40<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer<br>                                      | <br> 1.00<br> 0.50               |  |
| 553:<br>Cohoe, dry                   | <br>  55<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer<br>  Slope                               | <br> 1.00<br> 0.50<br> 0.37      |  |
| Kenai                                | <br>  30<br>           | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave                                            | <br> 0.37<br> 0.10               |  |
| 554:<br>Cohoe, dry                   | <br>  55<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>  Dense layer                               | <br> 1.00<br> 1.00<br> 0.50      |  |
| Kenai                                | 30                     | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                                            | <br> 1.00<br> 0.10               |  |
| 555:<br>Cohoe, dry                   | <br>  70<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>  Dense layer                               | <br> 1.00<br> 1.00<br> 0.50      |  |
| Nikolai                              | <br>  30<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Corganic matter content | <br> 1.00<br> 1.00<br> 1.00      |  |
| 556:<br>Cohoe, dry                   | <br>  70<br>           | <br> Very limited:<br>  Cutbanks cave<br>  Dense layer                                          | <br> <br> 1.00<br> 0.50          |  |
| Nikolai                              | 30                     | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content  | <br> 1.00<br> 1.00<br> 1.00      |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | <br> Percent<br>  of             | <br>  Shallow excavations<br>  (Standard criteria)                                                          |                                      |  |
|--------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------|--|
|                          | map<br>unit<br> <br>             | Rating class and Imiting features                                                                           | Value                                |  |
| 557:<br>Cytex Creek      | <br> <br> 75<br> <br>            | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                                     | <br> <br> 1.00<br> 1.00              |  |
| 558:<br>Doroshin         | <br>  83<br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave              | <br> <br> 1.00<br> 1.00<br> 0.10     |  |
| 559:<br>Doroshin         | <br>  79<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave              | <br> 1.00<br> 1.00<br> 0.10          |  |
| 560:<br>Dystrocryepts    | <br>  50<br>                     | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                            | <br> 1.00<br> 1.00                   |  |
| Typic Cryorthents        | 30<br> <br>                      | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                                            | <br> 1.00<br> 1.00                   |  |
| Iliamna, cool            | <br>  20<br> <br>                | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                            | <br> 1.00<br> 1.00                   |  |
| 561:<br>Foreland         | <br>  79<br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                      | <br> <br> 1.00<br> 1.00              |  |
| 562:<br>Foreland         | <br>  59<br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                                          | <br> <br> 1.00<br> 1.00              |  |
| Soldotna                 | <br>  20<br>                     | <br> Very limited:<br>  Cutbanks cave                                                                       | <br> <br> 1.00                       |  |
| Starichkof               | <br>  20<br> <br> <br> <br> <br> | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |  |
| 563:<br>Pits, gravel     | <br>  95<br>                     | <br> Not rated<br>                                                                                          |                                      |  |
| 564:<br>Iliamna          | <br>  80<br>                     | <br> Very limited:<br>  Cutbanks cave<br>                                                                   | <br> <br> 1.00<br>                   |  |
| 565:<br>Iliamna          | <br>  82<br> <br>                | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                            | <br> <br> 1.00<br> 0.16              |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | Percent                | <br>  Shallow excavations<br>  (Standard criteria)   |                         |
|--------------------------|------------------------|------------------------------------------------------|-------------------------|
|                          | map<br>  unit<br> <br> | Rating class and I limiting features                 | Value<br> <br>          |
| 566:<br>Iliamna          | <br> <br> 80<br>       | <br> Very limited:<br>  Slope<br>  Cutbanks cave     | <br> <br> 1.00<br> 1.00 |
| 567:<br>Iliamna, cool    | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave                | <br> <br> 1.00          |
| 568:<br>Island           | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave                | 1.00                    |
| 569:<br>Island           | <br>  91<br>           | <br> Very limited:<br>  Cutbanks cave                | <br> <br> 1.00          |
| 570:<br>Island           | <br>  90<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope     | <br> <br> 1.00<br> 0.63 |
| 571:<br>Island           | <br>  92<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br> | <br> <br> 1.00<br> 1.00 |
| 572:<br>Island, forested | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave<br>            | <br> <br> 1.00          |
| 573:<br>Kachemak         | <br>  80<br>           | <br> Somewhat limited:<br>  Cutbanks cave            | <br> <br> 0.10          |
| 574:<br>Kachemak         | <br>  80<br> <br>      | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave | <br> <br> 0.37<br> 0.10 |
| 575:<br>Kachemak         | <br>  80<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br> | <br> <br> 1.00<br> 0.10 |
| 576:<br>Kachemak         | <br>  80<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br> | <br> <br> 1.00<br> 0.10 |
| 577:<br>Kachemak         | <br>  90<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave     | <br> <br> 1.00<br> 0.10 |
| 578:<br>Kachemak, cool   | <br>  80<br>           | <br> Somewhat limited:<br>  Cutbanks cave<br>        | <br> <br> 0.10<br>      |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name   | Percent<br>  of      | <br>  Shallow excavations<br>  (Standard criteria)                                |                             |
|----------------------------|----------------------|-----------------------------------------------------------------------------------|-----------------------------|
|                            | map<br>  unit<br>    | Rating class and limiting features                                                | Value                       |
| 579:<br>Kachemak, cool     | <br> <br>- 80<br>    | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 0.37<br> 0.10     |
| 580:<br>Kachemak, cool     | <br>-   80<br>       | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> 1.00<br> 0.10          |
| 581:<br>Kachemak, cool     | <br>-   80<br> <br>  | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> 1.00<br> 0.10          |
| 582:<br>Kachemak, cool     | <br> -   80<br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> <br> 1.00<br> 0.10     |
| 583:<br>Kachemak, forested | <br> -   75<br>      | <br> Somewhat limited:<br>  Cutbanks cave                                         | <br> <br> 0.10              |
| 584:<br>Kachemak, forested | <br>-   85<br> <br>  | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 0.37<br> 0.10     |
| 585:<br>Kachemak, forested | <br>-   80<br> <br>  | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> 1.00<br> 0.10          |
| 586:<br>Kachemak, cool     | <br> -   60<br>      | <br> Somewhat limited:<br>  Cutbanks cave                                         | <br> <br> 0.10              |
| Snowdance                  | <br>- 40<br> <br>    | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                | <br> <br> 1.00<br> 0.10     |
| 587:<br>Kachemak, cool     | <br> -   65<br>      | <br> Somewhat limited:<br>  Cutbanks cave                                         | j<br> <br> 0.10             |
| Snowdance                  | <br> - 35<br> <br>   | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                | <br> 1.00<br> 0.10          |
| 588:<br>Kachemak, cool     | <br> -   70<br>      | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 0.37<br> 0.10     |
| Snowdance                  | -   30<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave<br> | <br> 1.00<br> 0.37<br> 0.10 |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name            | Percent of             | <br>  Shallow excavations<br>  (Standard criteria)                      |                         |
|-------------------------------------|------------------------|-------------------------------------------------------------------------|-------------------------|
|                                     | map<br>  unit<br> <br> | Rating class and limiting features                                      | Value<br> <br>          |
| 589:<br>Kalifonsky                  | <br> <br>  83<br> <br> | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave | <br> <br> 1.00<br> 1.00 |
| 590:<br>Kalifonsky                  | <br>  85<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave      | <br> 1.00<br> 1.00      |
| 591:<br>Kalifonsky                  | <br>  50<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave      | <br> 1.00<br> 1.00      |
| Typic Cryorthents                   | 30<br> <br> <br>       | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                    | <br> 1.00<br> 1.00      |
| 592:<br>Karluk                      | <br>  80<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  | <br> <br> 1.00<br> 0.10 |
| 593:<br>Kashwitna                   | <br>  85<br>           | <br> Very limited:<br>  Cutbanks cave                                   | i<br> <br> 1.00         |
| 594:<br>Kashwitna                   | <br>  88<br>           | <br> Very limited:<br>  Cutbanks cave                                   | <br> <br> 1.00          |
| 595:<br>Kashwitna                   | <br>  85<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                    | <br> 1.00<br> 0.63      |
| 596:<br>Kashwitna, moderately steep | <br>  50<br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                        | <br> <br> 1.00<br> 1.00 |
| Kashwitna, strongly sloping         | <br>  40<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                        | <br> <br> 1.00<br> 0.96 |
| 597:<br>Kenai                       | <br>  81<br>           | <br> -<br> Somewhat limited:<br>  Cutbanks cave<br>                     | <br> <br> 0.10          |
| 598:<br>Kenai                       | <br>  82<br> <br>      | <br> Somewhat limited:<br>  Cutbanks cave<br>                           | <br> <br> 0.10          |
| 599:<br>Kenai                       | <br>  85<br> <br>      | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave<br>                | <br> <br> 0.37<br> 0.10 |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name        | Percent of             | Shallow excavations<br>  (Standard criteria)   |                                            |
|---------------------------------|------------------------|------------------------------------------------|--------------------------------------------|
|                                 | map<br>  unit<br> <br> | Rating class and limiting features             | Value<br> <br>                             |
| 600:<br>Kenai                   | <br> <br>  88<br> <br> |                                                | <br> <br> <br> 1.00<br> 0.10               |
| 601:<br>Kenai                   | <br>  86<br> <br> <br> |                                                | <br> <br> 1.00<br> 0.10<br>                |
| 602:<br>Kenai, moderately steep | <br>  45<br> <br>      |                                                | <br> <br> 1.00<br> 0.10                    |
| Kenai, gently sloping           | <br>  40<br>           | <br> Somewhat limited:<br>  Cutbanks cave      | <br> <br> 0.10                             |
| 603:<br>Kenai                   | <br>  60<br>           |                                                | <br> <br> 0.63<br> 0.10                    |
| Starichkof                      |                        | Depth to saturated zone Organic matter content | <br> -<br> 1.00<br> 1.00<br> 1.00<br> 1.00 |
| 604:<br>Kichatna                | <br> <br>  70<br>      | <br> <br> Very limited:<br>  Cutbanks cave<br> | <br> <br> <br> 1.00                        |
| 605:<br>Kichatna                | <br>  75<br> <br>      |                                                | <br> <br> 1.00<br> 0.63<br>                |
| 606:<br>Kichatna                | <br>  75<br> <br> <br> |                                                | <br> <br> 1.00<br> 1.00<br>                |
| 607:<br>Kichatna                | <br>  85<br> <br> <br> |                                                | <br> <br> 1.00<br> 1.00<br>                |
| 608:<br>Kichatna                | <br>  70<br> <br> <br> |                                                | <br> <br> 1.00<br> 1.00<br>                |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name    | Percent   of           | Shallow excavations<br>  (Standard criteria)                                     |                             |
|-----------------------------|------------------------|----------------------------------------------------------------------------------|-----------------------------|
|                             | map<br>  unit<br> <br> | Rating class and I limiting features                                             | Value                       |
| 609:<br>Kichatna            | <br> <br>  50<br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                 | <br> <br> 1.00<br> 1.00     |
| Killey                      | <br>  50<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding | <br> 1.00<br> 1.00<br> 0.80 |
| 610:<br>Kidazqeni           | <br> 85<br>            | <br> Very limited:<br>  Cutbanks cave<br>                                        | <br> <br> 1.00<br>          |
| 611:<br>Killey              | <br>  45<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding | <br> 1.00<br> 1.00<br> 0.80 |
| Moose River                 | <br>  45<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding | <br> 1.00<br> 1.00<br> 0.80 |
| 612:<br>Liten               | <br>  85<br>           | <br> Very limited:<br>  Cutbanks cave<br>                                        | <br> <br> 1.00              |
| 613:<br>Lithic Haplocryands | <br>  55<br> <br>      | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave      | <br> 1.00<br> 1.00<br> 0.10 |
| Alic Haplocryands           | <br>  20<br> <br>      | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave      | <br> 1.00<br> 1.00<br> 1.00 |
| Rock outcrop                | <br>  17<br>           | <br> Not rated<br>                                                               |                             |
| 614:<br>Lithic Haplocryands | <br>  55<br> <br>      | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave      | <br> 1.00<br> 1.00<br> 0.10 |
| Alic Haplocryands           | <br>  20<br> <br>      | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave      | <br> 1.00<br> 1.00<br> 1.00 |
| Rock outcrop                | 20                     | <br> Not rated<br>                                                               |                             |
| 615:<br>Longmare            | <br> 80<br> <br> <br>  | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>           | <br> 1.00<br> 1.00          |

Table 19. Building Site Development: Site Improvements—Continued

| of               | Percent of map                  | <br>  Shallow excavations<br>  (Standard criteria)                                                                        |                                               |  |
|------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|
|                  | unit<br>  unit<br>              | Rating class and limiting features                                                                                        | Value<br> <br>                                |  |
| 616:<br>Longmare | <br> <br>  80<br> <br>          | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                               | <br> <br> 1.00<br> 1.00                       |  |
| 617:<br>Mutnala  | <br>  75<br>                    | <br> Very limited:<br>  Cutbanks cave                                                                                     | <br> <br> 1.00                                |  |
| 618:<br>Mutnala  | <br>  80<br>                    | <br> Very limited:<br>  Cutbanks cave                                                                                     | <br> <br> 1.00                                |  |
| 619:<br>Mutnala  | <br>  85<br> <br>               | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                                          | <br> <br> 1.00<br> 0.63                       |  |
| 620:<br>Mutnala  | <br>  85<br> <br> <br>          | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                                                          | <br> <br> 1.00<br> 1.00                       |  |
| 621:<br>Mutnala  | <br>  85<br> <br> <br>          | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                                                                      | <br> <br> 1.00<br> 1.00                       |  |
| 622:<br>Mutnala  | <br>  85<br> <br> <br>          | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                                                                      | <br> <br> 1.00<br> 1.00                       |  |
| 623:<br>Mutnala  | <br>  45<br> <br>               | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                                                          | <br> <br> 1.00<br> 1.00                       |  |
| Starichkof       | 35<br> <br> <br> <br>           | <br>  Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave              | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |  |
| Slikok           | 20<br> <br> <br> <br> <br> <br> | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content<br>  Flooding | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.60 |  |
| 624:<br>Naptowne | <br>  80<br>                    | <br> Very limited:<br>  Cutbanks cave<br>                                                                                 | <br> <br> 1.00                                |  |
| 625:<br>Naptowne | <br>  80<br>                    | <br> Very limited:<br>  Cutbanks cave<br>                                                                                 | <br> <br> 1.00<br>                            |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name           | Percent of                  | <br>  Shallow excavations<br>  (Standard criteria)                                |                             |
|------------------------------------|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------|
|                                    | map<br>  unit<br> <br>      | Rating class and Imiting features                                                 | Value<br> <br>              |
| 626:<br>Naptowne                   | <br> <br>  80<br> <br>      | <br> <br> Very limited:<br>  Cutbanks cave<br>  Slope                             | <br> <br> 1.00<br> 0.16     |
| 627:<br>Naptowne                   | <br>  80<br> <br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> 1.00<br> 1.00          |
| 628:<br>Naptowne                   | <br>  80<br> <br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> 1.00<br> 1.00          |
| 629:<br>Naptowne                   | <br>  80<br>                | <br> Very limited:<br>  Cutbanks cave<br>                                         | <br> <br> 1.00              |
| 630:<br>Naptowne, moderately steep | <br>  45<br> <br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                  | <br> <br> 1.00<br> 1.00     |
| Naptowne, strongly sloping         | <br>  40<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                  | <br> 1.00<br> 0.96          |
| 631:<br>Naptowne, strongly sloping | <br>  45<br>                | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                  | <br> 1.00<br> 0.63          |
| Naptowne, gently sloping           | <br>  40<br>                | <br> Very limited:<br>  Cutbanks cave<br>                                         | <br> <br> 1.00              |
| 632:<br>Niklason                   | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Flooding<br>                           | <br> <br> 1.00<br> 0.60     |
| 633:<br>Nikolaevsk                 | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>            | <br> <br> 1.00<br> 1.00     |
| 634:<br>Nikolaevsk                 | <br>  83<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>            | <br> <br> 1.00<br> 1.00     |
| 635:<br>Nikolaevsk                 | <br>  85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope<br> | <br> 1.00<br> 1.00<br> 0.37 |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name                 | Percent of                  | <br>  Shallow excavations<br>  (Standard criteria)                                                  |                                  |
|------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------|
|                                          | map<br>  unit<br> <br>      | Rating class and limiting features                                                                  | Value<br> <br>                   |
| 636:<br>Nikolai                          | <br> <br>  90<br> <br> <br> | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content | <br> <br> 1.00<br> 1.00<br> 1.00 |
| 637:<br>Nikolai, somewhat poorly drained | <br>  60<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content      | <br> 1.00<br> 1.00<br> 1.00      |
| Tuxedni                                  | <br>  25<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                              | <br> 1.00<br> 1.00               |
| 638:<br>Puntilla                         | <br>  80<br> <br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                                                | <br> <br> 1.00<br> 0.01          |
| 639:<br>Puntilla                         | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                    | <br> <br> 1.00<br> 1.00          |
| 640:<br>Qutal                            | <br>  77<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                                  | <br> <br> 1.00<br> 1.00          |
| 641:<br>Qutal                            | <br>  80<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                                  | <br> <br> 1.00<br> 1.00          |
| 642:<br>Qutal                            | <br>  80<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope                       | <br> 1.00<br> 1.00<br> 0.37      |
| 643:<br>Redoubt, terraces                | <br>  85<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>                                                           | <br> <br> 1.00                   |
| 644:<br>Redoubt                          | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                                                | <br> <br> 1.00<br> 0.16          |
| 645:<br>Redoubt                          | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                                                | <br> <br> 1.00<br> 1.00          |
| 646:<br>Redoubt, cool                    | <br>  80<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>                                                           | <br> <br> 1.00<br>               |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name   Pe  |                                       | •                                                                                                                         | Shallow excavations (Standard criteria)       |  |
|--------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|
|                                | map<br>  unit<br> <br>                | Rating class and Illimiting features                                                                                      | Value<br> <br>                                |  |
| 647: Redoubt, moderately steep | <br> <br>  45<br> <br>                | <br> <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                                     | <br> <br> 1.00<br> 1.00                       |  |
| Redoubt, gently sloping        | <br>  40<br>                          | <br> Very limited:<br>  Cutbanks cave                                                                                     | 1.00                                          |  |
| 648:<br>Redoubt, cool          | <br>  55<br>                          | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                                          | <br> <br> 1.00<br> 0.04                       |  |
| Tuxedni                        | <br>  35<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope                                             | <br> 1.00<br> 1.00<br> 0.04                   |  |
| 649:<br>Riverwash              | <br> 100<br>                          | <br> Not rated<br>                                                                                                        | İ                                             |  |
| 650:<br>Salamatof              | <br>  70<br> <br> <br> <br>           | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave               | <br> 1.00<br> 1.00<br> 1.00<br> 0.10          |  |
| Doroshin                       | <br>  22<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave                            | <br> 1.00<br> 1.00<br> 0.10                   |  |
| 651:<br>Salamatof              | <br>  80<br> <br> <br> <br>           | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave               | <br> 1.00<br> 1.00<br> 1.00<br> 0.10          |  |
| 652:<br>Slikok                 | <br>  85<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content<br>  Flooding | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.60 |  |
| 653:<br>Slikok                 | <br>  82<br> <br> <br> <br> <br> <br> | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content<br>  Flooding | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.60 |  |
| 654:<br>Smithfha               | <br>  85<br> <br>                     | <br> Very limited:<br>  Cutbanks cave<br>                                                                                 | <br> <br> 1.00<br>                            |  |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name           | Percent of             | <br>  Shallow excavations<br>  (Standard criteria)                            |                             |
|------------------------------------|------------------------|-------------------------------------------------------------------------------|-----------------------------|
|                                    | map<br>  unit<br> <br> | Rating class and Imiting features                                             | Value                       |
| 655:<br>Smithfha                   | <br> <br>  90<br> <br> | <br> <br> Very limited:<br>  Slope<br>  Cutbanks cave                         | <br> <br> 1.00<br> 1.00     |
| 656:<br>Smokey Bay                 | <br>  77<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave            | <br> <br> 1.00<br> 0.10     |
| 657:<br>Smokey Bay                 | <br>  77<br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave | <br> 1.00<br> 0.37<br> 0.10 |
| 658:<br>Snowdance                  | <br>  90<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave            | <br> <br> 1.00<br> 0.10     |
| 659:<br>Soldotna                   | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave                                         | 1.00                        |
| 660:<br>Soldotna                   | <br>  90<br>           | <br> Very limited:<br>  Cutbanks cave                                         | <br> <br> 1.00              |
| 661:<br>Soldotna                   | <br> <br>  85<br> <br> | <br> Very limited:<br>  Cutbanks cave<br>  Slope                              | <br> <br> 1.00<br> 0.63     |
| 662:<br>Soldotna                   | <br>  85<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                          | <br> <br> 1.00<br> 1.00     |
| 663:<br>Soldotna, sandy substratum | <br>  80<br>           | <br> Very limited:<br>  Cutbanks cave                                         | <br> <br> 1.00              |
| 664:<br>Soldotna, sandy substratum | <br> <br>  75<br> <br> | <br> Very limited:<br>  Cutbanks cave<br>  Slope                              | <br> <br> 1.00<br> 0.37     |
| 665:<br>Soldotna, sandy substratum | <br> <br>  80<br> <br> | <br> Very limited:<br>  Slope<br>  Cutbanks cave                              | <br> <br> 1.00<br> 1.00     |
| 666:<br>Soldotna, sandy substratum | <br> <br>  80<br>      | <br> <br> Very limited:<br>  Cutbanks cave<br>                                | <br> <br> <br> 1.00         |

Table 19. Building Site Development: Site Improvements—Continued

| į                                  | Percent                | <br>  Shallow excavations<br>  (Standard criteria)                     |                             |
|------------------------------------|------------------------|------------------------------------------------------------------------|-----------------------------|
|                                    | map<br>  unit<br> <br> | Rating class and I limiting features                                   | Value                       |
| 667:<br>Soldotna, strongly sloping | <br> <br>  45<br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                       | <br> <br> 1.00<br> 0.16     |
| Soldotna, gently sloping           | <br>  40<br>           | <br> Very limited:<br>  Cutbanks cave                                  | 1.00                        |
| 668:<br>Soldotna, sandy substratum | <br>  55<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave                       | <br> 1.00<br> 1.00          |
| Kenai                              | 40<br> <br>            | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                   | <br> 1.00<br> 0.10          |
| 669:<br>Soldotna, sandy substratum | <br>  55<br>           | <br> Very limited:<br>  Cutbanks cave                                  | <br> <br> 1.00              |
| Kenai                              | <br>  40<br>           | <br> Somewhat limited:<br>  Cutbanks cave                              | <br> <br> 0.10              |
| 670:<br>Soldotna                   | <br>  50<br>           | <br> Very limited:<br>  Cutbanks cave<br>  Slope                       | <br> 1.00<br> 0.63          |
| Kichatna                           | <br>  40<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope<br>                   | <br> 1.00<br> 0.63          |
| 671:<br>Soldotna                   | <br>  50<br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                       | <br> 1.00<br> 1.00          |
| Kichatna                           | <br>  40<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave<br>                   | <br> 1.00<br> 1.00          |
| 672:<br>Soldotna                   | <br>  55<br>           | <br> Very limited:<br>  Cutbanks cave                                  | <br> <br> 1.00              |
| Nikolai                            | <br>  45<br> <br> <br> |                                                                        | <br> 1.00<br> 1.00<br> 1.00 |
| 673:<br>Spenard                    | <br>  89<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br> | <br> <br> 1.00<br> 0.10     |
| 674:<br>Spenard                    | <br>  67<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave     | <br> 1.00<br> 0.10          |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name     | Percent of                        | <br>  Shallow excavations<br>  (Standard criteria)                                                                   |                                               |
|------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|                              | map<br>  unit<br> <br>            | Rating class and limiting features                                                                                   | Value<br> <br> _                              |
| 675:<br>Spenard              | <br> <br>  87<br> <br>            | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Cutbanks cave                                        | <br> <br> 1.00<br> 0.63<br> 0.10              |
| 676:<br>Starichkof           | <br> -<br>  60<br> <br> <br>      | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave          | <br> 1.00<br> 1.00<br> 1.00                   |
| Doroshin                     | <br> -<br>  35<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave                       | <br> 1.00<br> 1.00<br> 0.10                   |
| 677:<br>Starichkof           | <br>  75<br> <br> <br> <br>       | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| 678:<br>Starichkof           | <br>  82<br> <br> <br> <br>       | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| 679:<br>Starichkof, forested | <br> -   85<br> <br> <br> <br>    | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| 680:<br>Starichkof           | <br>  45<br> <br> <br>            | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00          |
| Slikok                       | 30<br> <br> <br> <br>             | Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Organic matter content<br>  Flooding | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.60 |
| Naptowne                     | <br> -<br>  25<br> <br>           | <br> Very limited:<br>  Cutbanks cave<br>                                                                            | <br> <br> 1.00<br>                            |

Table 19. Building Site Development: Site Improvements—Continued

| 2: usitna 4: alkeetna 6: alkeetna tarichkof 8: eaches, tidal flats 9: | Percent of             | Shallow excavation:<br>  (Standard criteria)                                                                | S                                    |
|-----------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------|
|                                                                       | map<br>  unit<br> <br> | Rating class and limiting features                                                                          | Value<br> <br>                       |
| 681:<br>Starichkof                                                    | <br>  50<br> <br> <br> | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |
| Spenard                                                               | <br>  42<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                      | <br> 1.00<br> 0.10                   |
| 682:<br>Susitna                                                       | <br>  85<br>           | <br> Very limited:<br>  Cutbanks cave                                                                       | <br> <br> 1.00                       |
| Riverwash                                                             | 5                      | <br> Not rated<br>                                                                                          |                                      |
| 683:<br>Susitna                                                       | <br>  85<br>           | <br> -<br> Very limited:<br>  Cutbanks cave<br>                                                             | 1.00                                 |
| 684:<br>Talkeetna                                                     | <br>  94<br>           | <br> Very limited:<br>  Cutbanks cave<br>                                                                   | 1.00                                 |
| 685:<br>Talkeetna                                                     | <br>  90<br> <br>      | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                                            | <br> <br> 1.00<br> 1.00              |
| 686:<br>Talkeetna                                                     | <br>  55<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                                            | <br> 1.00<br> 1.00                   |
| Starichkof                                                            | 40<br> <br> <br> <br>  | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 |
| 687:<br>Tangerra                                                      | <br>  80<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                      | <br> <br> 1.00<br> 1.00              |
| 688:<br>Beaches, tidal flats                                          | <br>  90<br>           | <br> Not rated<br>                                                                                          | İ                                    |
| 689:<br>Tlikakila                                                     | <br>  90<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                      | <br> <br> 1.00<br> 1.00              |
| 690:<br>Tlikakila                                                     | <br>  87<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>                                      | <br> 1.00<br> 1.00                   |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | Percent of map              | <br>  Shallow excavation:<br>  (Standard criteria)                                 | 6                                |
|--------------------------|-----------------------------|------------------------------------------------------------------------------------|----------------------------------|
|                          | unit                        | Rating class and Imiting features                                                  | Value                            |
| 691:<br>Tlikakila        | <br> <br>  85<br> <br> <br> | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope | <br> <br> 1.00<br> 1.00<br> 0.63 |
| 692:<br>Tokositna        | <br>  85<br>                | <br> Somewhat limited:<br>  Cutbanks cave                                          | <br> <br> 0.10                   |
| 693:<br>Tokositna        | <br> <br>  90<br>           | <br> -<br> Somewhat limited:<br>  Cutbanks cave<br>                                | <br> <br> <br> 0.10              |
| 694:<br>Tokositna        | <br>  90<br> <br> <br>      | <br> Somewhat limited:<br>  Slope<br>  Cutbanks cave<br>                           | <br> <br> 0.16<br> 0.10          |
| 695:<br>Truuli           | <br>  88<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>             | <br> <br> 1.00<br> 1.00          |
| 696:<br>Tutka            | <br>  45<br> <br>           | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave        | <br> 1.00<br> 1.00<br> 1.00      |
| Kasitsna                 | <br> 40<br>                 | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                   | <br> 1.00<br> 1.00               |
| Rock outcrop             | <br>  15<br>                | l<br> Not rated<br>                                                                | <br> <br>                        |
| 697:<br>Tutka            | <br>  55<br> <br> <br>      | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave        | <br> 1.00<br> 1.00<br> 1.00      |
| Portgraham               | <br>  30<br> <br> <br> <br> | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Cutbanks cave<br>    | <br> 1.00<br> 1.00<br> 0.10      |
| 698:<br>Tuxedni          | <br>  85<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>             | <br> 1.00<br> 1.00               |
| 699:<br>Tuxedni          | <br>  85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Slope<br>  | <br> 1.00<br> 1.00<br> 0.63      |

Table 19. Building Site Development: Site Improvements—Continued

| Map symbol and soil name | Percent of                  | Shallow excavatio<br>  (Standard criteria                                                      |                             |
|--------------------------|-----------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
|                          | map<br>  unit<br> <br>      | Rating class and limiting features                                                             | Value                       |
| 700:<br>Tuxedni, warm    | <br> <br>  85<br> <br>      | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave                        | <br> <br> 1.00<br> 1.00     |
| 701:<br>Typic Cryaquents | <br>  95<br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Cutbanks cave<br>  Flooding               | <br> 1.00<br> 1.00<br> 0.80 |
| 702: Typic Cryopsamments | <br> <br>  84<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                               | <br> <br> 1.00<br> 1.00     |
| 703: Typic Cryorthents   | <br> <br>  80<br> <br>      | <br> <br> Very limited:<br>  Slope<br>  Cutbanks cave                                          | <br> <br> 1.00<br> 1.00     |
| 704:<br>Urban land       | <br>  85                    | <br> Not rated                                                                                 |                             |
| 705: Water, fresh        | <br> <br> 100               | <br> <br> Not rated                                                                            |                             |
| 706: Whitsol             | <br> <br> 90<br>            | <br> <br> Very limited:<br>  Cutbanks cave                                                     | <br> <br> <br> 1.00         |
| 707:<br>Whitsol          | <br> <br> 90<br>            | <br> <br> Very limited:<br>  Cutbanks cave                                                     | <br> <br> <br> 1.00         |
| 708:<br>Whitsol          | <br> <br>  85<br> <br>      | <br> Very limited:<br>  Cutbanks cave<br>  Slope                                               | <br> <br> 1.00<br> 0.63     |
| 709:<br>Whitsol          | <br>  85<br> <br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                               | <br> <br> 1.00<br> 1.00     |
| 710: Whitsol             | <br>  85<br> <br>           | <br> Very limited:<br>  Slope<br>  Cutbanks cave                                               | <br> <br> 1.00<br> 1.00     |
| 711: Whitsol             | <br>  55<br>                | <br> Very limited:<br>  Cutbanks cave                                                          | <br> <br> 1.00              |
| Doroshin                 | <br>  30<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Organic matter content<br>  Cutbanks cave | <br> 1.00<br> 1.00<br> 0.10 |

## Table 20. Sanitary Facilities: Sewage Treatement and Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name               | <br>  Pct.<br>  of<br>  map           | ! ' '                                                                                                                         | lds                             | Sewage lagoons<br>  (Alaska criteria)                                       |                                       | Sanitary landfill (area)<br>(Standard criteria)                                     |                                       |  |
|----------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|--|
|                                        | unit<br> <br> <br>                    | Rating class and limiting features                                                                                            | Value<br> <br>                  | Rating class and limiting features                                          | Value<br> <br>                        | Rating class and limiting features                                                  | Value<br> <br>                        |  |
| 501:<br>Aquic Cryofluvents             | <br>  85<br> <br> <br> <br> <br>      | Depth to saturated zone Depth to bedrock Depth to cemented pan                                                                | 1.00<br> 1.00<br> 1.00          |                                                                             | <br> <br> 1.00<br> 1.00<br> 1.00      | <br> <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Seepage<br> | <br> <br> 1.00<br> 1.00<br> 1.00      |  |
| 502:<br>Aquic Cryofluvents,<br>shallow | <br> <br>  80<br> <br> <br> <br> <br> | Depth to saturated zone Depth to bedrock Depth to cemented pan                                                                | 1.00<br> 1.00<br> 1.00          |                                                                             | <br> <br> <br> 1.00<br> 1.00<br> 1.00 | <br>                                                                                | <br> <br> <br> 1.00<br> 1.00<br> 1.00 |  |
| 503:<br>Badland, sea cliffs            | <br> <br> 100                         | <br> <br> Not rated                                                                                                           | <br> <br>                       | <br> <br> Not rated                                                         | <br> <br>                             | <br> <br> Not rated                                                                 |                                       |  |
| 504:<br>Badland, sea cliffs            | <br> <br>  55                         | <br> <br> Not rated                                                                                                           | <br> <br>                       | <br> <br> Not rated                                                         | <br> <br>                             | <br> <br> Not rated                                                                 |                                       |  |
| Typic Cryorthents                      | <br>  45<br> <br> <br> <br> <br>      | Slope                                                                                                                         | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                         | <br> 1.00<br> 1.00<br> <br> <br>      | <br> Very limited:<br>  Slope<br> <br> <br> -                                       | <br> 1.00<br> <br> <br> <br>          |  |
| 505:<br>Beaches                        | 90                                    | <br> <br> Not rated                                                                                                           | <br> <br>                       | <br> <br> Not rated                                                         | <br> <br>                             | <br> <br> Not rated                                                                 |                                       |  |
| 506:<br>Beluga                         | <br> <br>  85<br> <br> <br>           | Depth to saturated zone Restricted permeability                                                                               | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            |                                       | <br> <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>                  | <br> <br> 1.00<br> <br>               |  |
| 507:<br>Beluga                         | <br> <br>  87<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Seepage     | <br> <br> 1.00<br> 0.68<br> 0.50      | <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>                       | <br> <br> <br> 1.00<br> <br>          |  |
| 508:<br>Beluga                         | <br>  87<br> <br> <br> <br> <br>      | Depth to cemented pan                                                                                                         | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Depth to saturated zone<br>  Seepage<br> | <br> <br> 1.00<br> 1.00<br> 0.50<br>  | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br> <br>                 | <br> <br> 1.00<br> 0.16<br> <br>      |  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map             | ! ' '                                                                                                                         | lds                             | Sewage lagoons<br>  (Alaska criteria)                                       |                                  | Sanitary landfill (area) (Standard criteria)                             |                                  |
|--------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------|----------------------------------|
|                          | unit                          |                                                                                                                               | Value<br> <br>                  | Rating class and limiting features                                          | Value<br> <br>                   | Rating class and limiting features                                       | Value                            |
| 509:<br>Beluga           | <br>  55<br> <br> <br>        | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan | 1.00<br> 1.00<br> 1.00          | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>       |                                  | <br> <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>       | <br> <br> 1.00<br> <br>          |
| Mutnala                  | 40<br> <br> <br> <br>         | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                         | <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br> <br>                            | <br> <br> 1.00<br> <br> <br>     |
| 510:<br>Beluga           | <br>  60<br> <br>             | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Seepage<br> | <br> <br> 1.00<br> 0.68<br> 0.50 | <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>            | <br> <br> 1.00<br> <br> <br>     |
| Smokey Bay               | 37<br> <br> <br> <br>         | Depth to saturated zone                                                                                                       | 1.00<br> 1.00<br> 1.00          |                                                                             |                                  | <br> Very limited:<br>  Depth to saturated zone<br> <br> <br>            | <br> <br> 1.00<br> <br> <br>     |
| 511:<br>Beluga           | 50<br> <br> <br>              | Depth to cemented pan                                                                                                         | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Depth to saturated zone<br>  Seepage<br> | 1.00                             | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br> <br>      | <br> <br> 1.00<br> 0.16<br> <br> |
| Smokey Bay               | 47<br> <br> <br> <br> <br>    | Depth to saturated zone Depth to bedrock Depth to cemented pan                                                                | 1.00<br> 1.00<br> 1.00<br> 0.63 | Very limited:   Slope   Depth to saturated zone   Seepage                   | 1.00                             | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br> <br> <br> | <br> 1.00<br> 0.63<br> <br> <br> |
| 512:<br>Benka            | <br>    86<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone                              | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br> <br>                                    | <br> <br> 1.00<br> <br>          | <br> Very limited:<br>  Seepage<br> <br>                                 | <br> <br> 1.00<br> <br>          |
| 513:<br>Benka            | 90<br> <br> <br>              | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone                              | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                              | <br> <br> 1.00<br> 0.92<br>      | <br> Very limited:<br>  Seepage<br> <br>                                 | <br> <br> 1.00<br> <br>          |
| 514:<br>Benka            | <br>    85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope                   | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br>                              | <br> <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                           | <br> <br> 1.00<br> 0.37<br> <br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name         | of                                    | <br>  Septic tank absorption fie<br>  (Alaska criteria)                                                                  | Sewage lagoons<br>  (Alaska criteria)              |                                                     | Sanitary landfill (area)<br>(Standard criteria) |                                                     |                         |
|----------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|-----------------------------------------------------|-------------------------|
|                                  | map<br>  unit<br> <br>                |                                                                                                                          | Value<br> <br>                                     | Rating class and Imiting features                   | Value<br> <br>                                  | Rating class and limiting features                  | Value                   |
| 515:<br>Benka                    | <br> <br>  90<br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone              | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> <br> 1.00<br> 1.00<br>                     | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> | <br> <br> 1.00<br> 1.00 |
| 516:<br>Benka                    | <br> <br>  95<br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone              |                                                    | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> <br> 1.00<br> 1.00                         | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> <br> 1.00<br> 1.00 |
| 517:<br>Benka, strongly sloping- | <br>  45<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope              |                                                    | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> <br> 1.00<br> 1.00<br>                     | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.63<br>  |
| Benka, gently sloping            | <br>  40<br> <br> <br>                | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone                         |                                                    | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.68                              | <br> Very limited:<br>  Seepage<br> <br>            | <br> 1.00<br>           |
| 518:<br>Boxcar                   | <br> <br>  75<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity |                                                    | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> <br> 1.00<br> 0.32<br>                     | <br> Very limited:<br>  Seepage<br> <br>            | <br> <br> 1.00<br> <br> |
| 519:<br>Boxcar                   | <br> <br>  80<br> <br> <br> <br> <br> | Depth to cemented pan Depth to saturated zone                                                                            |                                                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>                          | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 1.00<br>  |
| 520:<br>Boxcar                   | <br>  85<br> <br> <br> <br> <br> <br> |                                                                                                                          | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>                          | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>  |
| 521:<br>Boxcar, cool             | <br>  80<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity | <br> 1.00<br> 1.00<br> 1.00<br> 0.50               | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.32<br> <br>                     | <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> 1.00<br> <br>      |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name                 | Pct.   Septic tank absorption fields     of   (Alaska criteria)     map |                                                                                                                                        |                                                    | Sewage lagoons<br>  (Alaska criteria)                       |                              | Sanitary landfill (area)<br>  (Standard criteria)           |                             |
|------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|------------------------------|-------------------------------------------------------------|-----------------------------|
|                                          | map<br>  unit<br>                                                       |                                                                                                                                        | Value<br> <br>                                     | Rating class and limiting features                          | Value<br> <br>               | Rating class and limiting features                          | Value                       |
| 522:<br>Boxcar, cool                     | <br>  80<br> <br> <br>                                                  | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity    | 1.00<br> 1.00<br> 1.00                             | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br>    | <br> <br> 1.00<br> 1.00      | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br>    | <br> <br> 1.00<br> 1.00<br> |
| 523:<br>Chenega                          | <br>  85<br> <br> <br> <br>                                             | <br> Very limited:<br>  Flooding<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Flooding<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>       | <br> Very limited:<br>  Flooding<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>      |
| 524:<br>Chenega, cool                    | <br>  90<br> <br> <br> <br>                                             | Depth to cemented pan Depth to saturated zone                                                                                          | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Flooding<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br> <br>  | <br> Very limited:<br>  Flooding<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>      |
| 525:<br>Chenega, occasionally<br>flooded | <br> <br>  85<br> <br> <br>                                             | Depth to cemented pan Depth to saturated zone                                                                                          | 1.00<br> 1.00<br> 1.00                             | <br> <br> Very limited:<br>  Flooding<br>  Seepage<br> <br> | <br> <br> <br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Flooding<br>  Seepage<br> <br> | <br> 1.00<br> 1.00          |
| 526:<br>Chulitna                         | 90                                                                      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity               | 1.00<br> 1.00                                      | <br> Very limited:<br>  Seepage<br> <br> <br>               | <br> <br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br> <br> <br>               | <br> <br> 1.00<br> <br>     |
| 527:<br>Chulitna                         | <br>  80<br> <br> <br>                                                  | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity               | 1.00<br> 1.00                                      | <br> Very limited:<br>  Seepage<br>  Slope<br>              | <br> 1.00<br> 0.92<br>       | <br> Very limited:<br>  Seepage<br> <br>                    | <br> 1.00<br> <br>          |
| 528:<br>Chulitna                         | <br>  85<br> <br> <br> <br> <br>                                        | Depth to saturated zone Slope                                                                                                          | <br> <br> 1.00<br> 1.00<br> 1.00<br> 0.63<br> 0.50 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>         | <br> 1.00<br> 1.00<br>       | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>         | <br> 1.00<br> 0.63<br> <br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map             | ! ' '                                                                                                                                    | lds                    | Sewage lagoons<br>  (Alaska criteria)                                                                                      |                                                    |                                                                                              | 1)                                        |
|--------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | unit                          |                                                                                                                                          | Value<br> <br>         | Rating class and limiting features                                                                                         | Value                                              | Rating class and limiting features                                                           | Value<br> <br>                            |
| 529:<br>Chulitna         | 85<br> <br> <br> <br> <br>    | Slope Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                     | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                                             | <br> <br> 1.00<br> 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br>                                               | <br> <br> 1.00<br> 1.00<br>               |
| 530:<br>Chunilna         | <br>  92<br> <br> <br>        | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>                                                           | <br> <br> 1.00<br> 1.00<br> <br>                   | <br> Very limited:<br>  Depth to saturated zone<br> <br>                                     | <br> <br> 1.00<br> <br> <br>              |
| 531:<br>Chunilna         | <br>  82<br> <br> <br>        | Depth to saturated zone                                                                                                                  | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope                                                    | 1.00                                               | <br> Very limited:<br>  Depth to saturated zone<br> <br>                                     | <br> <br> 1.00<br> <br> <br>              |
| 532:<br>Chunilna, cool   | 80<br> <br> <br>              | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope                                                    | 1.00                                               | <br> Very limited:<br>  Depth to saturated zone<br> <br>                                     | <br> <br> 1.00<br> <br>                   |
| 533:<br>Chunilna, cool   | <br>    85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability<br>  Slope | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Seepage<br>  Depth to saturated zone                                                  | <br> 1.00<br> 1.00<br> 1.00<br> 1.00               | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>                               | <br> 1.00<br> 0.16<br>                    |
| 534:<br>Clam Gulch       | <br>    85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan            | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>                                                           | 1.00                                               | <br> Very limited:<br>  Depth to saturated zone<br> <br>                                     | <br> <br> 1.00<br> <br> <br>              |
| 535:<br>Clunie           | 90                            | <br> Very limited:<br>  Flooding<br>  Restricted permeability<br>  Ponding<br>  Depth to saturated zone<br>  Subsidence                  | 1.00<br> 1.00<br> 1.00 | Very limited:<br>  Ponding<br>  Flooding<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 | <br> Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Seepage | <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 |
| 536:<br>Coal Creek       | <br>  75<br> <br> <br> <br>   | Depth to cemented pan Restricted permeability                                                                                            | 1.00<br> 1.00          | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>                                                      | <br> <br> 1.00<br> 0.53<br> <br>                   | <br> Very limited:<br>  Depth to saturated zone<br>  Flooding<br> <br>                       | <br> <br> 1.00<br> 0.40<br>               |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map             | ! ' !                                                                                                                         |                        | Sewage lagoons<br>  (Alaska criteria)                                        |                                       | Sanitary landfill (area) (Standard criteria)                       |                                  |
|--------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------|----------------------------------|
|                          | unit                          |                                                                                                                               | Value<br> <br>         | Rating class and limiting features                                           | Value<br> <br>                        | Rating class and limiting features                                 | Value                            |
| 537:<br>Coal Creek       | <br>  88<br> <br> <br>        | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>  Seepage |                                       | <br> <br> Very limited:<br>  Depth to saturated zone<br> <br> <br> | <br> <br> 1.00<br> <br>          |
| 538:<br>Coal Creek       | <br>  88<br> <br> <br> <br>   | Depth to cemented pan Restricted permeability                                                                                 | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Depth to saturated zone<br>  Seepage<br>  | 1.00                                  | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>     | <br> <br> 1.00<br> 0.37<br> <br> |
| 539:<br>Cohoe            | <br>  87<br> <br>             | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00                   | <br> Very limited:<br>  Seepage<br> <br>                                     | <br> <br> 1.00<br> <br>               | <br> Very limited:<br>  Seepage<br> <br>                           | <br> <br> 1.00<br> <br> <br>     |
| 540:<br>Cohoe            | <br>  85<br> <br> <br>        | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                               | <br> <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br>                           | <br> <br> 1.00<br> <br>          |
| 541:<br>Cohoe            | 89<br> <br> <br> <br>         | Depth to cemented pan Depth to saturated zone                                                                                 | 1.00<br> 0.37          | <br> Very limited:<br>  Slope<br>  Seepage<br>                               | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>                     | <br> <br> 1.00<br> 0.37<br> <br> |
| 542:<br>Cohoe            | <br>  93<br> <br> <br>        |                                                                                                                               | 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br>                               | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                | <br> 1.00<br> 1.00<br> <br> <br> |
| 543:<br>Cohoe            | <br>    80<br> <br> <br> <br> | Depth to cemented pan Depth to saturated zone                                                                                 |                        | <br> Very limited:<br>  Slope<br>  Seepage<br>                               | <br> 1.00<br> 1.00<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                | <br> 1.00<br> 1.00<br> <br> <br> |
| 544:<br>Cohoe            | <br>  84<br> <br> <br> <br>   |                                                                                                                               | 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                          | <br> 1.00<br> 1.00<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                | <br> 1.00<br> 1.00<br> <br>      |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name     | Pct.   Septic tank absorption fields<br>of (Alaska criteria)<br>  map |                                                                                                                                          |                                                    | Sewage lagoons<br>  (Alaska criteria)               |                             | Sanitary landfill (area)<br>  (Standard criteria)   |                         |  |
|------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|-----------------------------|-----------------------------------------------------|-------------------------|--|
|                              | IIIap<br>  unit<br> <br>                                              |                                                                                                                                          | Value                                              | Rating class and limiting features                  | Value                       | Rating class and limiting features                  | Value                   |  |
| 545:<br>Cohoe, dry           | <br> <br>  87<br> <br> <br>                                           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                             | <br> <br> Very limited:<br>  Seepage<br> <br>       | <br> <br> 1.00<br>          | <br> <br> Very limited:<br>  Seepage<br> <br>       | 11.00                   |  |
| 546:<br>Cohoe, dry           | <br> <br>  85<br> <br> <br> <br>                                      |                                                                                                                                          | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> <br> 1.00<br> 0.92<br> | <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> <br> 1.00<br> <br> |  |
| 547:<br>Cohoe, dry           | <br>  89<br> <br> <br> <br>                                           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 0.37                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.37<br>  |  |
| 548:<br>Cohoe, dry           | <br>  93<br> <br> <br> <br>                                           | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>  |  |
| 549:<br>Cohoe, dry           | <br>  80<br> <br> <br> <br>                                           | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                    | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br>  |  |
| 550:<br>Cohoe, dry           | <br>  84<br> <br> <br> <br> <br>                                      | Slope Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                     | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.20 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>  |  |
| 551: Cohoe, moderately steep | <br>  45<br> <br> <br> <br>                                           | Depth to saturated zone                                                                                                                  | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.20      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 1.00<br>  |  |
| Cohoe, gently sloping        | <br>  40<br> <br> <br> <br>                                           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            |                                                    | <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> 1.00<br> 0.92<br> <br> | <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> 1.00<br> <br> <br> |  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name                | of                                    | ! ' '                                                                                                                                    | Sewage lagoons<br>  (Alaska criteria) |                                                          | Sanitary landfill (a<br>  (Standard crite |                                                          |                                  |
|-----------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------|-------------------------------------------|----------------------------------------------------------|----------------------------------|
|                                         | map<br>  unit<br> <br>                |                                                                                                                                          | Value<br> <br>                        | Rating class and limiting features                       | Value                                     | Rating class and limiting features                       | Value                            |
| 552:<br>Cohoe, dry, moderately<br>steep |                                       |                                                                                                                                          | 1.00<br> 1.00<br> 1.00<br> 1.00       | <br> <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> <br> <br> 1.00<br> 1.00              | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> <br> <br> 1.00<br> 1.00     |
| Cohoe, dry, gently sloping              | <br>  40<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 0.92<br>                    | <br> Very limited:<br>  Seepage<br> <br> <br>            | 1.00                             |
| 553:<br>Cohoe, dry                      | <br>  55<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 0.37       | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 0.37<br>           |
| Kenai                                   | <br>  30<br> <br> <br> <br> <br> <br> | Restricted permeability                                                                                                                  | 1.00<br> 1.00<br> 1.00                | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> 1.00<br> 0.37<br> <br>      |
| 554:<br>Cohoe, dry                      | <br>  55<br> <br> <br> <br>           | Slope                                                                                                                                    | 1.00<br> 1.00<br> 1.00<br> 1.00       | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>           |
| Kenai                                   | <br>  30<br> <br> <br> <br> <br>      | Slope                                                                                                                                    |                                       | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br> | <br> 1.00<br> 1.00<br> <br> <br>          | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br> | <br> 1.00<br> 1.00<br> <br> <br> |
| 555:<br>Cohoe, dry                      | <br>  70<br> <br> <br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability |                                       | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 1.00<br>           |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map                | ! '                                                          | lds                                                     | <br>  Sewage lagoons<br>  (Alaska criteria)                                                                      |                                                | Sanitary landfill (area)<br>(Standard criteria)                                 |                                             |
|--------------------------|----------------------------------|--------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------|
|                          | unit                             | Rating class and limiting features                           | Value<br> <br>                                          | Rating class and limiting features                                                                               | Value<br> <br>                                 | Rating class and limiting features                                              | Value                                       |
| 555:<br>Nikolai          | <br>  30<br> <br> <br> <br>      | zone   Subsidence   Depth to bedrock   Depth to cemented pan | 1.00<br> <br> 1.00<br> 1.00                             | <br>  Very limited:<br>  Excess surface organic<br>  matter<br>  Seepage<br>  Depth to saturated zone<br>  Slope | 1.00<br> <br> 1.00                             | <br> <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br> <br> | <br> <br> 1.00<br> <br> 1.00<br> <br>       |
| 556:<br>Cohoe, dry       | <br>  70<br> <br>                |                                                              | 1.00<br> 1.00<br> 1.00                                  | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                   | <br> <br> 1.00<br> 0.92<br>                    | <br> Very limited:<br>  Seepage<br> <br> <br>                                   | <br> <br> 1.00<br> <br>                     |
| Nikolai                  | <br>  30<br> <br> <br> <br> <br> | zone Subsidence Depth to bedrock Depth to cemented pan       | 1.00<br> <br> 1.00<br> 1.00                             | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone             | 1.00<br> <br> 1.00                             | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br>           | <br> 1.00<br> <br> 1.00<br> <br>            |
| 557:<br>Cytex Creek      | <br>  75<br> <br> <br>           | Depth to cemented pan                                        | 1.00<br> 1.00                                           | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope<br>                                      | 1.00                                           | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>           | <br> <br> 1.00<br> 1.00<br>                 |
| 558:<br>Doroshin         | 83<br> <br> <br> <br> <br> <br>  | zone Subsidence Depth to bedrock Depth to cemented pan       | <br> <br> 1.00<br> <br> 1.00<br> 1.00<br> 1.00<br> 0.45 | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Seepage             | <br> 1.00<br> <br> 1.00<br> 1.00<br> 0.50<br>  | <br> Very limited:<br>  Depth to saturated<br>  zone<br>                        | <br> <br> 1.00<br> <br> <br> <br> <br>      |
| 559:<br>Doroshin         | <br>  79<br> <br> <br> <br> <br> | zone Subsidence Depth to bedrock Depth to cemented pan       | <br> <br> 1.00<br> <br> 1.00<br> 1.00<br> 1.00<br> 0.45 | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Slope<br>  Seepage  | <br> <br> 1.00<br> <br> 1.00<br> 0.68<br> 0.50 | <br> Very limited:<br>  Depth to saturated<br>  zone<br> <br> <br>              | <br> <br> 1.00<br> <br> <br> <br> <br> <br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | <br>  Pct.<br>  of<br>  map           | <br>  Septic tank absorption fie<br>  (Alaska criteria)        | lds                                                 | Sewage lagoons<br>  (Alaska criteria)                                                                                     |                                                     | Sanitary landfill (area<br>  (Standard criteria)                                | 1)                                    |
|--------------------------|---------------------------------------|----------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------|
|                          | map<br>  unit<br> <br>                |                                                                | Value<br> <br>                                      | Rating class and limiting features                                                                                        | Value<br> <br>                                      | Rating class and limiting features                                              | Value<br> <br>                        |
| 560:<br>Dystrocryepts    | <br> <br>  50<br> <br> <br> <br>      | Depth to bedrock Depth to cemented pan Depth to saturated zone | 1.00<br> 1.00<br> 1.00                              | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                       | <br> <br> 1.00<br> 1.00<br> <br>                    | <br> <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                        | <br> <br> 1.00<br> 1.00<br>           |
| Typic Cryorthents        | <br>  30<br> <br> <br> <br> <br>      |                                                                | 1.00<br> 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                                       | <br>                                                | <br> Very limited:<br>  Slope<br> <br> <br>                                     | <br> <br> 1.00<br> <br> <br>          |
| Iliamna, cool            | <br>  20<br> <br> <br> <br> <br>      | Depth to bedrock Depth to cemented pan Depth to saturated zone | 1.00<br> 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                                                                       | <br>                                                | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                             | <br> 1.00<br> 1.00<br> <br> <br>      |
| 561:<br>Foreland         | <br>  79<br> <br> <br> <br> <br>      | zone Depth to bedrock Depth to cemented pan                    | <br> <br> 1.00<br> <br> 1.00<br> 1.00<br> 0.50      | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone                      | 1.00<br> <br> 1.00                                  | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br>           | <br> <br> 1.00<br> <br> 1.00<br>      |
| 562:<br>Foreland         | <br> <br>  59<br> <br> <br> <br>      | zone Depth to bedrock Depth to cemented pan                    | <br> <br> 1.00<br> <br> 1.00<br> 1.00<br> 0.50      | Very limited:   Excess surface   organic matter   Seepage   Depth to saturated zone                                       | <br> <br> 1.00<br> <br> 1.00<br> 1.00               | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br>           | <br> <br> 1.00<br> <br> 1.00          |
| Soldotna                 | <br>  20<br> <br> <br> <br>           | Depth to cemented pan Depth to saturated zone                  | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                            | <br> 1.00<br> 0.92<br>                              | <br> Very limited:<br>  Seepage<br> <br> <br>                                   | <br> <br> 1.00<br> <br>               |
| Starichkof               | <br>  20<br> <br> <br> <br> <br> <br> | Depth to saturated zone Subsidence                             | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00 | Not rated   Not rated; Fragments   > 75mm   Ponding   Excess surface   organic matter   Depth to saturated zone   Seepage | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50 | <br> Very limited:<br>  Ponding<br> <br>  Depth to saturated zone<br> <br> <br> | <br> 1.00<br> <br> 1.00<br> <br> <br> |
| 563:<br>Pits, gravel     | <br> <br>  95<br>                     | <br> <br> Not rated<br>                                        | <br> <br> <br>                                      | <br> <br> Not rated<br>                                                                                                   | <br> <br> <br>                                      | <br> <br> Not rated<br>                                                         | <br> <br> <br>                        |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map           | ! ' '                                                                                                                               | lds                    | Sewage lagoons<br>  (Alaska criteria)                    |                             | Sanitary landfill (a<br>  Standard crite            |                                  |
|--------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------|-----------------------------|-----------------------------------------------------|----------------------------------|
|                          | unit                        |                                                                                                                                     | Value<br> <br>         | Rating class and limiting features                       | Value                       | Rating class and Imiting features                   | Value                            |
| 564:<br>Iliamna          | <br>  80<br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            | 1.00<br> 1.00          | <br> <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> <br> 1.00<br>          | <br> <br> Very limited:<br>  Seepage<br> <br> <br>  | <br> <br> 1.00<br>               |
| 565:<br>Iliamna          | <br>  82<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity<br>  Slope | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> <br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> <br> 1.00<br> 0.16<br> <br> |
| 566:<br>Iliamna          | <br>  80<br> <br> <br> <br> | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>           |
| 567:<br>Iliamna, cool    | 90<br> <br> <br> <br>       | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> 1.00<br> 0.32<br>      | <br> Very limited:<br>  Seepage<br> <br>            | <br> 1.00<br>                    |
| 568:<br>Island           | 90<br> <br> <br> <br>       | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            | 1.00<br> 1.00          | <br> <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> <br> 1.00<br>          | <br> Very limited:<br>  Seepage<br> <br>            | <br> <br> 1.00<br> <br>          |
| 569:<br>Island           | <br>    91<br> <br> <br>    | Very limited:   Depth to bedrock   Depth to cemented pan   Depth to saturated zone   Filtering capacity                             | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> <br> 1.00<br> 0.92<br> | <br> Very limited:<br>  Seepage<br> <br>            | <br> <br> 1.00<br>               |
| 570:<br>Island           | <br>  90<br> <br> <br> <br> | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity | 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br> | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> 1.00<br> 0.63<br>           |
| 571:<br>Island           | <br>  92<br> <br> <br>      |                                                                                                                                     | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>           |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct. of map                      | ! ' '                                                                                                                                    | lds                                                | Sewage lagoons<br>  (Alaska criteria)               |                        | Sanitary landfill (a<br>  (Standard crite           |                         |
|--------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|------------------------|-----------------------------------------------------|-------------------------|
|                          | unit<br> <br>                    |                                                                                                                                          | Value                                              | Rating class and limiting features                  | Value                  | Rating class and Imiting features                   | Value                   |
| 572:<br>Island, forested | <br> <br>  90<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity                 | 1.00<br> 1.00                                      | <br> <br> Very limited:<br>  Seepage<br> <br>       | 1.00                   | <br> <br> Very limited:<br>  Seepage<br> <br>       | 1.00                    |
| 573:<br>Kachemak         | <br>  80<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> 1.00<br> 0.92<br> | <br> <br> Very limited:<br>  Seepage<br> <br> <br>  | <br> <br> 1.00<br> <br> |
| 574:<br>Kachemak         | <br>  80<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability<br>  Slope | 1.00                                               | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.37<br>  |
| 575:<br>Kachemak         | <br>  80<br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>  |
| 576:<br>Kachemak         | <br>  80<br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                    | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br>  |
| 577:<br>Kachemak         | <br>  90<br> <br> <br> <br> <br> | Depth to saturated zone                                                                                                                  | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.91 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> 1.00<br> 1.00     | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br>  |
| 578:<br>Kachemak, cool   | <br>  80<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.92<br> | <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> 1.00<br> <br>      |
| 579:<br>Kachemak, cool   | <br>  80<br> <br> <br> <br>      |                                                                                                                                          | •                                                  | <br> Very limited:<br>  Slope<br>  Seepage<br>      | <br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> 1.00<br> 0.37<br>  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name   | Pct.<br>of map                        | <br>  Septic tank absorption fie<br>  (Alaska criteria)                                                                                  | lds                             | Sewage lagoons<br>  (Alaska criteria)                                 |                                       | Sanitary landfill (area<br>  (Standard criteria)                      |                                  |
|----------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------|----------------------------------|
|                            | map<br>  unit<br> <br>                |                                                                                                                                          | Value                           | Rating class and limiting features                                    | Value                                 | Rating class and limiting features                                    | Value                            |
| 580:<br>Kachemak, cool     | <br> <br>  80<br> <br> <br> <br> <br> |                                                                                                                                          | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 581:<br>Kachemak, cool     | <br>  80<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 582:<br>Kachemak, cool     | <br>  80<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 583:<br>Kachemak, forested | <br> <br>  75<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>                        | <br> <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br>                              | <br> <br> 1.00<br> <br>          |
| 584:<br>Kachemak, forested | <br>  85<br> <br> <br> <br> <br>      |                                                                                                                                          | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                   | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                        | <br> <br> 1.00<br> 0.37<br> <br> |
| 585:<br>Kachemak, forested | <br>  80<br> <br> <br> <br> <br>      | Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                           | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 586:<br>Kachemak, cool     | <br>  60<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br> <br>                              | <br> <br> 1.00<br> <br>               | <br> Very limited:<br>  Seepage<br> <br> <br>                         | <br> <br> 1.00<br> <br>          |
| Snowdance                  | <br>  40<br> <br> <br> <br> <br>      | Depth to cemented pan                                                                                                                    | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br> <br> | <br> 1.00<br> 1.00<br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br>           |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | of                               | <br>  Septic tank absorption fie<br>  (Alaska criteria)                                                                                  | lds                    | Sewage lagoons<br>  (Alaska criteria)                                       |                                  | Sanitary landfill (area<br>  (Standard criteria)                            |                              |
|--------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------|------------------------------|
|                          | map<br>  unit<br> <br>           |                                                                                                                                          | Value<br> <br>         | Rating class and limiting features                                          | Value<br> <br>                   | Rating class and limiting features                                          | Value                        |
| 587:<br>Kachemak, cool   | <br> <br>  65<br> <br> <br>      |                                                                                                                                          | 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                         | <br> <br> 1.00<br> 0.92<br>      | <br> <br> Very limited:<br>  Seepage<br> <br> <br>                          | <br> <br> 1.00<br> <br>      |
| Snowdance                | <br>  35<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope<br> | 1.00                             | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>       | <br> 1.00<br> 1.00<br> <br>  |
| 588:<br>Kachemak, cool   | <br>  70<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability<br>  Slope |                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                         | <br> 1.00<br> 1.00<br> 1.00<br>  | <br> Very limited:<br>  Seepage<br>  Slope<br>                              | <br> 1.00<br> 0.37<br> <br>  |
| Snowdance                | <br>  30<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability<br>  Slope | 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to saturated zone<br> | 1.00<br> 1.00                    | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br> | <br> 1.00<br> 1.00<br> 0.37  |
| 589:<br>Kalifonsky       | <br>  83<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>            | 1.00                             | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>       | <br> <br> 1.00<br> 1.00<br>  |
| 590:<br>Kalifonsky       | <br>  85<br> <br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope     | 1.00                             | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            | <br> <br> 1.00<br> 1.00<br>  |
| 591:<br>Kalifonsky       | <br>  50<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope     | <br> <br> 1.00<br> 1.00<br> 0.68 | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            | <br> <br> 1.00<br> 1.00<br>  |
| Typic Cryorthents        | <br>  30<br> <br> <br> <br> <br> | Depth to saturated zone                                                                                                                  | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                         | <br>                             | <br> Very limited:<br>  Slope<br> <br> <br> -                               | <br> 1.00<br> <br> <br> <br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name         | of                               | ! ' '                                                                                                                               | lds                                                     | Sewage lagoons<br>  (Alaska criteria)                                 |                                       | Sanitary landfill (area<br>  (Standard criteria)                   |                                  |
|----------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------|----------------------------------|
|                                  | map<br>  unit<br> <br>           |                                                                                                                                     | Value<br> <br>                                          | Rating class and limiting features                                    | Value<br> <br>                        | Rating class and limiting features                                 | Value                            |
| 592:<br>Karluk                   | <br>  80<br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability       | 1.00<br> 1.00                                           | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> |                                       | <br> <br> Very limited:<br>  Depth to saturated zone<br> <br> <br> | <br> <br> 1.00<br> <br>          |
| 593:<br>Kashwitna                | <br> 85<br> <br> <br>            | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            |                                                         | <br> Very limited:<br>  Seepage<br> <br> <br>                         | <br> <br> 1.00<br> <br> <br>          | <br> Very limited:<br>  Seepage<br> <br> <br>                      | <br> <br> 1.00<br> <br> <br>     |
| 594:<br>Kashwitna                | <br>  88<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            | 1.00<br> 1.00                                           | <br> Very limited:<br>  Seepage<br>  Slope<br>                        | <br> <br> 1.00<br> 0.92<br> <br>      | <br> Very limited:<br>  Seepage<br> <br> <br> <br>                 | <br> <br> 1.00<br> <br> <br>     |
| 595:<br>Kashwitna                | <br>  85<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity |                                                         | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                   | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                     | <br> 1.00<br> 0.63<br> <br>      |
| 596: Kashwitna, moderately steep | <br> <br>  50<br> <br> <br> <br> | Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity                               | <br> <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.50 | <br> <br> Very limited:<br>  Slope<br>  Seepage<br>                   | <br> <br> <br> 1.00<br> 1.00<br>      | <br> <br> Very limited:<br>  Slope<br>  Seepage<br>                | <br> <br> <br> 1.00<br> 1.00<br> |
| Kashwitna, strongly sloping      | <br> 40<br> <br> <br> <br>       | <br> Very limited:<br>  Depth to bedrock<br>  Depth to camented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity | 1.00<br> 1.00                                           | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                   | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                | <br> <br> 1.00<br> 0.96<br> <br> |
| 597:<br>Kenai                    | <br>  81<br> <br> <br> <br>      | <br> Very limited:<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone       | •                                                       | <br> Very limited:<br>  Seepage<br> <br> <br>                         | <br> <br> 1.00<br> <br> <br>          | <br> Very limited:<br>  Seepage<br> <br>                           | <br> <br> 1.00<br> <br> <br>     |
| 598:<br>Kenai                    | <br>  82<br> <br> <br> <br>      | <br> Very limited:<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone       |                                                         | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                   | <br> <br> 1.00<br> 0.92<br> <br>      | <br> Very limited:<br>  Seepage<br> <br> <br>                      | <br> <br> 1.00<br> <br> <br>     |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name           | of                               | ! '                                                                                                                                 | lds                             | Sewage lagoons<br>  (Alaska criteria)                                                                                                  |                                       | Sanitary landfill (area<br>  (Standard criteria)                           |                                  |
|------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------|----------------------------------|
|                                    | map<br>  unit<br> <br>           |                                                                                                                                     | Value                           | Rating class and limiting features                                                                                                     | Value<br> <br>                        | Rating class and limiting features                                         | Value                            |
| 599:<br>Kenai                      | <br>  85<br> <br> <br> <br> <br> |                                                                                                                                     | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                                                         | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                             | <br> <br> 1.00<br> 0.37<br> <br> |
| 600:<br>Kenai                      | <br>  88<br> <br> <br> <br> <br> | Restricted permeability                                                                                                             | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                                                    | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                        | <br> <br> 1.00<br> 1.00<br> <br> |
| 601:<br>Kenai                      | <br>  86<br> <br> <br> <br> <br> | Restricted permeability                                                                                                             | 1.00<br> 1.00                   | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                                                    | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 602:<br>Kenai, moderately<br>steep | <br> <br>  45<br> <br> <br> <br> |                                                                                                                                     | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                                               | <br> <br> <br> 1.00<br> 1.00<br>      | <br> <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                   | <br> <br> <br> 1.00<br> 1.00<br> |
| Kenai, gently sloping              | <br>  40<br> <br> <br> <br>      | <br> Very limited:<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone       | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                                         | <br> 1.00<br> 0.92<br>                | <br> Very limited:<br>  Seepage<br> <br> <br>                              | <br> <br> 1.00<br> <br>          |
| 603:<br>Kenai                      | <br>  60<br> <br> <br> <br> <br> | Very limited:<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                                         | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>                             | <br> <br> 1.00<br> 0.63<br> <br> |
| Starichkof                         | <br>  31<br> <br> <br> <br> <br> |                                                                                                                                     | <br> <br> 1.00                  | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone | <br> <br> <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Ponding<br> <br>  Depth to saturated zone<br> <br> | <br> 1.00<br> <br> 1.00<br>      |
|                                    | <br> <br>                        | Depth to bedrock                                                                                                                    | 1.00<br> 1.00<br>               | Seepage<br>                                                                                                                            | 0.50<br>                              | <br>                                                                       | İ                                |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | of                          | Septic tank absorption fie<br>  (Alaska criteria)                                                                                      | lds                                           | Sewage lagoons<br>  (Alaska criteria)                                          |                                       | Sanitary landfill (area<br>  (Standard criteria)                                    |                                       |
|--------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|
|                          | map<br>  unit<br> <br>_ _   | !                                                                                                                                      | Value<br> <br>                                | Rating class and limiting features                                             | Value<br> <br>                        | Rating class and limiting features                                                  | Value                                 |
| 604:<br>Kichatna         | <br>  70<br> <br>           | Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity                                        | 1.00<br> 1.00                                 | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                            | <br> <br> 1.00<br> 0.32<br>           | <br> <br> Very limited:<br>  Seepage<br> <br> <br>                                  | <br> <br> 1.00<br> <br>               |
| 605:<br>Kichatna         | <br>  75<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity    | 1.00<br> 1.00                                 | <br> Very limited:<br>  Slope<br>  Seepage<br>                                 | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                                      | <br> <br> 1.00<br> 0.63<br> <br>      |
| 606:<br>Kichatna         | 75<br> <br> <br> <br>       | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity    | 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                            | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                 | <br> <br> 1.00<br> 1.00<br> <br>      |
| 607:<br>Kichatna         | <br>  85<br> <br> <br>      | Depth to bedrock                                                                                                                       | 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                            | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                 | <br> <br> 1.00<br> 1.00<br>           |
| 608:<br>Kichatna         | <br>  70<br> <br> <br>      | Depth to cemented pan Depth to saturated zone                                                                                          | 1.00<br> 1.00<br> 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br>                       | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br>                            | <br> <br> 1.00<br> 1.00<br> <br> <br> |
| 609:<br>Kichatna         | 50<br> <br>                 |                                                                                                                                        | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                            | <br> 1.00<br> 1.00<br> 1.00           | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                 | <br> <br> 1.00<br> 1.00<br> <br>      |
| Killey                   | <br>  50<br> <br> <br> <br> | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity | 1.00                                          | <br> Very limited:<br>  Flooding<br>  Seepage<br>  Depth to saturated zone<br> | <br> 1.00<br> 1.00<br> 1.00<br> 1.00  | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Seepage<br> <br> | <br> 1.00<br> 1.00<br> 1.00<br>       |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name    | of                                    | ! '                                                              | lds                             | Sewage lagoons (Alaska criteria)                                                    |                                      | Sanitary landfill (area<br>  (Standard criteria)                               |                                  |
|-----------------------------|---------------------------------------|------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------|----------------------------------|
|                             | map<br>  unit<br> <br>                |                                                                  | Value<br> <br>                  | Rating class and limiting features                                                  | Value<br> <br>                       | Rating class and limiting features                                             | Value                            |
| 610:<br>Kidazqeni           | <br>  85<br> <br> <br> <br> <br>      | Depth to cemented pan Depth to saturated zone Filtering capacity | 1.00<br> 1.00                   | <br> <br> Very limited:<br>  Seepage<br> <br> <br>                                  | <br> <br> 1.00<br> <br> <br> <br>    | <br> <br> Very limited:<br>  Seepage<br>  Flooding<br>                         | <br> <br> 1.00<br> 0.40<br>      |
| 611:<br>Killey              | <br>  45<br> <br> <br> <br> <br>      | Depth to saturated zone Depth to bedrock Depth to cemented pan   | 1.00<br> 1.00<br> 1.00          |                                                                                     | <br> <br> 1.00<br> 1.00<br> 1.00     | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Seepage<br> | <br> <br> 1.00<br> 1.00<br> 1.00 |
| Moose River                 | <br>  45<br> <br> <br> <br> <br> <br> | Depth to saturated zone Depth to bedrock Depth to cemented pan   | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Flooding<br>  Seepage<br>  Depth to saturated zone<br> <br> | 1.00<br> 1.00                        | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br> <br> <br>    | <br> 1.00<br> 1.00<br> <br> <br> |
| 612:<br>Liten               | <br>  85<br> <br> <br> <br>           | Depth to cemented pan Depth to saturated zone                    | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                                      | <br> <br> 1.00<br> 0.08<br>          | <br> Very limited:<br>  Seepage<br> <br>                                       | <br> <br> 1.00<br> <br>          |
| 613:<br>Lithic Haplocryands | <br>  55<br> <br> <br> <br> <br>      |                                                                  | 1.00<br> 1.00<br> 1.00<br> 1.00 |                                                                                     | <br> 1.00<br> 1.00<br> 0.53<br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br> <br>                   | <br> 1.00<br> 1.00<br> <br>      |
| Alic Haplocryands           | <br>  20<br> <br> <br> <br> <br>      | Restricted permeability Depth to bedrock                         | 1.00<br> 1.00<br> 1.00<br> 1.00 | Very limited:   Depth to hard bedrock   Slope   Seepage                             |                                      |                                                                                | <br> 1.00<br> 1.00<br> 1.00      |
| Rock outcrop                | <br>  17<br>                          | l<br> Not rated<br>                                              | <br> <br>                       | l<br> Not rated<br>                                                                 | <br> <br>                            | l<br> Not rated<br>                                                            | <br> <br>                        |
| 614:<br>Lithic Haplocryands | <br>  55<br> <br> <br> <br> <br>      | Depth to bedrock                                                 |                                 | Slope                                                                               | <br> <br> 1.00<br> 1.00<br> 0.53<br> | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br> <br>                   | <br> <br> 1.00<br> 1.00<br> <br> |
| Alic Haplocryands           | <br>  20<br> <br> <br> <br> <br>      | Depth to bedrock                                                 | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Seepage<br>           | <br> 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to bedrock<br> <br>      | <br> 1.00<br> 1.00<br> 1.00<br>  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | of                            | Pct.   Septic tank absorption fields   of   (Alaska criteria)   map                                                                      |                                                    | Sewage lagoons<br>  (Alaska criteria)                                   |                                       | Sanitary landfill (area)<br>(Standard criteria)                  |                                       |
|--------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------|---------------------------------------|
|                          | map<br>  unit<br> <br> _      |                                                                                                                                          | Value<br> <br>                                     | Rating class and limiting features                                      | Value<br> <br>                        | Rating class and limiting features                               | Value<br> <br>                        |
| 614:<br>Rock outcrop     | <br> <br> 20                  | <br> <br> Not rated<br>                                                                                                                  | <br> <br> <br>                                     | <br> <br> Not rated<br>                                                 | <br> <br> <br>                        | <br> <br> Not rated<br>                                          |                                       |
| 615:<br>Longmare         | <br>  80<br> <br>             | Depth to saturated zone Depth to bedrock Depth to cemented pan                                                                           | 1.00<br> 1.00                                      | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>        | <br> <br> 1.00<br> 1.00<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> | <br> <br> 1.00<br> 1.00<br>           |
| 616:<br>Longmare         | <br>  80<br> <br> <br>        | Depth to cemented pan                                                                                                                    | 1.00                                               | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope | <br> <br> 1.00<br> 1.00<br> 0.92      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> | <br> <br> 1.00<br> 1.00<br>           |
| 617:<br>Mutnala          | <br>  75<br> <br> <br>        | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br> <br> <br>                           | <br> <br> 1.00<br> <br>               | <br> Very limited:<br>  Seepage<br> <br>                         | <br> <br> 1.00<br> <br>               |
| 618:<br>Mutnala          | <br>    80<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br>  Slope<br>                          | <br> <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br>                         | <br> <br> 1.00<br> <br>               |
| 619:<br>Mutnala          | <br>    85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability<br>  Slope |                                                    | <br> Very limited:<br>  Slope<br>  Seepage<br>                          | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                   | <br> <br> 1.00<br> 0.63<br> <br>      |
| 620:<br>Mutnala          | <br>  85<br> <br> <br> <br>   | Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                           | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.73 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                     | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>              | <br> <br> 1.00<br> 1.00<br> <br>      |
| 621:<br>Mutnala          | <br>  85<br> <br> <br> <br>   | Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                           | <br> <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 0.73 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br>                | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>              | <br> <br> 1.00<br> 1.00<br> <br> <br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct. of map                            | ! ' /                                                                                                       | lds                                        | Sewage lagoons<br>  (Alaska criteria)                           |                                       | Sanitary landfill (area<br>(Standard criteria)                                                |                                            |
|--------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------|
|                          | unit<br>  unit<br>                     |                                                                                                             | Value<br> <br>                             | Rating class and limiting features                              | Value<br> <br>                        | Rating class and limiting features                                                            | Value<br> <br>                             |
| 622:<br>Mutnala          | <br> - 85<br> <br> <br>                |                                                                                                             | 1.00<br> 1.00<br> 1.00<br> 1.00            | <br> Very limited:<br>  Slope<br>  Seepage<br>                  | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                | <br> <br> 1.00<br> 1.00<br>                |
| 623:<br>Mutnala          | <br> -<br>  45<br> <br> <br> <br>      |                                                                                                             | 1.00<br> 1.00<br> 1.00<br> 1.00            | <br> Very limited:<br>  Slope<br>  Seepage<br>                  | <br> <br> <br> 1.00<br> 1.00<br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                | <br> <br> 1.00<br> 1.00<br> <br>           |
| Starichkof               | <br> - 35<br> <br> <br> <br> <br> <br> | Depth to saturated zone Subsidence                                                                          | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00 | Excess surface<br>  organic matter<br>  Depth to saturated zone | <br> <br> 1.00<br> 1.00<br>           | <br> Very limited:<br>  Ponding<br> <br>  Depth to saturated zone<br> <br> <br> <br>          | <br> 1.00<br> <br> 1.00<br> <br> <br>      |
| Slikok                   | <br>- 20<br> <br> <br> <br>            | Ponding Depth to saturated zone                                                                             | 1.00<br> 1.00<br> 1.00<br> 1.00<br>        | Excess surface<br>  organic matter                              | 1.00<br> 1.00<br> 1.00<br> 1.00<br>   | <br>  Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Seepage | <br> 1.00<br> 1.00<br> 1.00<br> <br>  1.00 |
| 624:<br>Naptowne         | <br> - 80<br> <br>                     | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone            | 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br> <br>                        | <br> <br> 1.00<br>                    | <br> Very limited:<br>  Seepage<br> <br>                                                      | <br> <br> 1.00<br>                         |
| 625:<br>Naptowne         | <br> -   80<br> <br>                   | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone            | 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Slope<br>                  | <br> <br> 1.00<br> 0.92               | <br> Very limited:<br>  Seepage<br> <br>                                                      | <br> <br> 1.00<br>                         |
| 626:<br>Naptowne         | <br>-   80<br> <br> <br>               |                                                                                                             | 1.00<br> 1.00                              | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>             | <br> <br> <br> 1.00<br> 1.00<br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                | <br> <br> 1.00<br> 0.16<br>                |
| 627:<br>Naptowne         | <br> - 80<br> <br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone | 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>             | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                           | <br> <br> 1.00<br> 1.00<br>                |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name              | Pct.<br>of<br>map                | ! ' /                                                                                                                    | lds                    | Sewage lagoons<br>  (Alaska criteria)                            |                                       | Sanitary landfill (area) (Standard criteria)                          |                                  |
|---------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------|----------------------------------|
|                                       | unit<br> <br>                    |                                                                                                                          | Value<br> <br>         | Rating class and limiting features                               | Value<br> <br>                        | Rating class and limiting features                                    | Value<br> <br>                   |
| 628:<br>Naptowne                      | <br> <br>  80<br> <br> <br>      | Slope                                                                                                                    | 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Slope<br>  Seepage<br>              | <br> <br> <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> 1.00<br> 1.00<br>      |
| 629:<br>Naptowne                      | <br> <br>  80<br> <br> <br>      | Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone                                             | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>                   | <br> <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br>                              | <br> <br> 1.00<br>               |
| 630: Naptowne, moderately steep       | <br> <br>  45<br> <br> <br>      |                                                                                                                          | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                   | <br> <br> <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                        | <br> <br> <br> 1.00<br> 1.00     |
| Naptowne, strongly sloping            | <br> <br>  40<br> <br> <br>      | Depth to cemented pan Depth to saturated zone                                                                            | 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Seepage<br>                   | <br> <br> <br> 1.00<br> 1.00<br>      | <br> Very limited:<br>  Seepage<br>  Slope<br>                        | <br> <br> 1.00<br> 0.96<br>      |
| 631:<br>Naptowne, strongly<br>sloping | <br> <br>  45<br> <br> <br>      | Depth to cemented pan Depth to saturated zone                                                                            | 1.00<br> 1.00          | <br> -<br> Very limited:<br>  Slope<br>  Seepage<br>             | <br> <br> <br> 1.00<br> 1.00<br>      | <br>                                                                  | <br> <br> <br> 1.00<br> 0.63<br> |
| Naptowne, gently sloping              | <br>  40<br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone                         | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br>                   | <br> <br> 1.00<br> 0.68               | <br> Very limited:<br>  Seepage<br> <br>                              | <br> <br> 1.00<br>               |
| 632:<br>Niklason                      | <br>  85<br> <br> <br> <br>      | Depth to cemented pan Depth to saturated zone                                                                            | 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Flooding<br>  Seepage<br> <br>           | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Flooding<br>  Seepage<br>                     | <br> <br> 1.00<br> 1.00<br> <br> |
| 633:<br>Nikolaevsk                    | <br> <br>  85<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity | 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br> | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00<br>      |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name                    | Pct.<br>of map                        | ! '                                                                                                                                      | lds                                                 | Sewage lagoons<br>  (Alaska criteria)                                                                     |                                       | Sanitary landfill (area)<br>  (Standard criteria)                               |                                       |  |
|---------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------|---------------------------------------|--|
|                                             | unit<br> <br> <br>                    |                                                                                                                                          | Value<br> <br>                                      | Rating class and limiting features                                                                        | Value<br> <br>                        | Rating class and limiting features                                              | Value                                 |  |
| 634:<br>Nikolaevsk                          | <br>  83<br> <br> <br> <br>           | Depth to cemented pan                                                                                                                    | 1.00<br> 1.00                                       | <br> <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope                              | <br> <br> 1.00<br> 1.00<br> 0.92      | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>      | <br> <br> 1.00<br> 1.00<br>           |  |
| 635:<br>Nikolaevsk                          | <br>  85<br> <br> <br> <br> <br>      | Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity                                                        | 1.00<br> 1.00                                       | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to saturated zone<br>                               | 1.00<br> 1.00                         | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br>     | <br> <br> 1.00<br> 1.00<br> 0.37      |  |
| 636:<br>Nikolai                             | <br>  90<br> <br> <br> <br> <br> <br> | zone   Subsidence   Depth to bedrock   Depth to cemented pan                                                                             | 1.00<br> <br> 1.00<br> 1.00                         | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone      | 1.00<br> <br> 1.00                    | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br>           | <br> <br> 1.00<br> <br> 1.00<br>      |  |
| 637:<br>Nikolai, somewhat<br>poorly drained | <br>  60<br> <br> <br> <br> <br>      | zone   Subsidence   Depth to bedrock   Depth to cemented pan                                                                             | <br> <br> <br> 1.00<br> <br> 1.00<br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone | <br> <br> 1.00<br> <br> 1.00<br> 1.00 | <br> <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage<br> <br> | <br> <br> 1.00<br> <br> 1.00<br> <br> |  |
| Tuxedni                                     | <br>  25<br> <br> <br>                | Depth to saturated zone                                                                                                                  | 1.00<br> 1.00                                       | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>                                          |                                       | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>                | <br> -<br> 1.00<br> 1.00              |  |
| 638:<br>Puntilla                            | <br> <br>  80<br> <br> <br>           |                                                                                                                                          | 1.00<br> 1.00<br> 1.00                              | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                                                       | <br> <br> <br> 1.00<br> 1.00<br>      | <br> <br> Very limited:<br>  Seepage<br> <br> <br>                              | <br> <br> 1.00<br> <br>               |  |
| 639:<br>Puntilla                            | <br>  85<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                            | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br>                                  | <br> <br> 1.00<br> 1.00<br>           |  |
| 640:<br>Qutal                               | <br> <br>  77<br> <br> <br> <br>      | Very limited:   Depth to saturated zone   Depth to bedrock   Depth to cemented pan   Filtering capacity                                  | 1.00<br> 1.00                                       | <br> <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br> <br>                                | <br> <br> <br> 1.00<br> 1.00<br>      | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>           | <br> <br> 1.00<br> 1.00<br>           |  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name       | of                                    | <br>  Septic tank absorption fie<br>  (Alaska criteria)                                                                                  | lds                             | Sewage lagoons<br>  (Alaska criteria)                                        |                                       | Sanitary landfill (area<br>  (Standard criteria)                            |                                  |
|--------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------|----------------------------------|
|                                | map<br>  unit<br> <br>                |                                                                                                                                          | Value<br> <br>                  | Rating class and limiting features                                           | Value<br> <br> <br>                   | Rating class and limiting features                                          | Value<br> <br>                   |
| 641:<br>Qutal                  | <br>  80<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00                   | <br> <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope | 1.00                                  | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>  | <br> <br> 1.00<br> 1.00<br>      |
| 642:<br>Qutal                  | <br>  80<br> <br> <br> <br> <br>      | Depth to cemented pan Filtering capacity                                                                                                 | 1.00<br> 1.00                   |                                                                              | <br> <br> 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br> | <br> 1.00<br> 1.00<br> 0.37<br>  |
| 643:<br>Redoubt, terraces      | <br>  85<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br> <br> <br>                                | <br> <br> <br> 1.00<br> <br> <br>     | <br> Very limited:<br>  Seepage<br> <br>                                    | <br> <br> 1.00<br> <br>          |
| 644:<br>Redoubt                | <br>  85<br> <br> <br> <br> <br>      | Depth to cemented pan Depth to saturated zone                                                                                            | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                               | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>                              | <br> <br> 1.00<br> 0.16<br> <br> |
| 645:<br>Redoubt                | <br>  85<br> <br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br>                               | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                         | <br> <br> 1.00<br> 1.00<br> <br> |
| 646:<br>Redoubt, cool          | <br> <br>  80<br> <br> <br> <br>      | Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                           | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                               | <br> <br> <br> 1.00<br> 0.32<br> <br> | <br> Very limited:<br>  Seepage<br> <br> <br>                               | <br> <br> 1.00<br> <br>          |
| 647: Redoubt, moderately steep | <br> <br>  45<br> <br> <br> <br> <br> | Depth to cemented pan Depth to saturated zone                                                                                            | 1.00<br> 1.00<br> 1.00          | <br> <br> -<br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br>          | <br> <br> <br> 1.00<br> 1.00<br>      | <br> -<br> Very limited:<br>  Seepage<br>  Slope<br> <br>                   | <br> <br> <br> 1.00<br> 1.00<br> |
| Redoubt, gently sloping-       | <br> 40<br> <br> <br> <br> <br>       | Depth to saturated zone                                                                                                                  | 1.00<br> 1.00                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                               | <br> 1.00<br> 0.92<br>                | <br> Very limited:<br>  Seepage<br> <br> <br> <br>                          | <br> 1.00<br> <br> <br> <br>     |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | of                                    | ! '                                                                                                                                       | lds                                                    | Sewage lagoons<br>  (Alaska criteria)                                                                                                               |                                                    | Sanitary landfill (area) (Standard criteria)                                                 |                                               |
|--------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------|
|                          | map<br>  unit<br> <br>                |                                                                                                                                           | Value<br> <br>                                         | Rating class and limiting features                                                                                                                  | Value<br> <br>                                     | Rating class and limiting features                                                           | Value                                         |
| 648:<br>Redoubt, cool    | <br>  55<br> <br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability<br>  Slope  | 1.00<br> 1.00<br> 1.00                                 | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                                                                                                 | <br> <br> 1.00<br> 1.00<br> <br>                   | <br> Very limited:<br>  Seepage<br>  Slope<br>                                               | <br> <br> 1.00<br> 0.04<br> <br>              |
| Tuxedni                  | <br>  35<br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Slope                               | 1.00<br>1.00                                           | Very limited: Depth to saturated zone Seepage Slope                                                                                                 | <br> 1.00<br> 1.00<br> 1.00<br>                    | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br>                  | <br> 1.00<br> 1.00<br> 0.04                   |
| 649:<br>Riverwash        | 100<br>                               | <br> <br> Not rated<br>                                                                                                                   |                                                        | <br> <br> Not rated<br>                                                                                                                             | <br> <br> <br>                                     | <br> <br> Not rated<br>                                                                      |                                               |
| 650:<br>Salamatof        | <br>  70<br> <br> <br> <br> <br> <br> | Not rated   Not rated; Fragments   > 75mm   Ponding   Depth to saturated   zone   Subsidence   Depth to bedrock                           | <br> <br> <br> 1.00<br> 1.00<br> <br> <br> 1.00        | Not rated   Not rated; Fragments   > 75mm   Ponding   Excess surface   organic matter   Seepage   Depth to saturated zone                           | <br> 1.00<br> 1.00<br> <br> 1.00                   | <br> Very limited:<br>  Ponding<br> <br>  Depth to saturated zone<br>  Seepage<br> <br>      | <br> 1.00<br> <br> 1.00<br> 1.00<br>          |
| Doroshin                 | <br>  22<br> <br> <br> <br> <br>      | Depth to cemented pan                                                                                                                     | 1.00<br> <br> 1.00<br> 1.00                            | Very limited:   Excess surface   organic matter   Depth to saturated zone   Seepage                                                                 | <br> 1.00<br> <br> 1.00<br> 1.00<br> 0.50<br>      | <br> Very limited:<br>  Depth to saturated<br>  zone<br> <br> <br>                           | <br> <br> 1.00<br> <br> <br> <br> <br>        |
| 651:<br>Salamatof        | <br>  80<br> <br> <br> <br> <br> <br> | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00    | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone | <br> -<br> 1.00<br> 1.00<br> -<br> 1.00            | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br>  Seepage<br>                | <br> <br> 1.00<br> <br> 1.00<br> 1.00         |
| 652:<br>Slikok           | <br>  85<br> <br> <br> <br> <br> <br> | <br> Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Depth to bedrock<br>  Depth to cemented pan          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> 1.00 |                                                                                                                                                     | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 | <br> Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Seepage | <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00<br> |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct. of map                      | ! '                                                                                                                           | lds                                        | Sewage lagoons<br>  (Alaska criteria)                                       |                                           | Sanitary landfill (area<br>  (Standard criteria)                                             |                                                |
|--------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------|
|                          | map<br>  unit<br>                |                                                                                                                               | Value<br> <br>                             | Rating class and limiting features                                          | Value<br> <br>                            | Rating class and limiting features                                                           | Value<br> <br>                                 |
| 653:<br>Slikok           | <br>  82<br> <br> <br> <br> <br> | Flooding Ponding Depth to saturated zone                                                                                      | 1.00<br> 1.00<br> 1.00<br> <br> <br> 1.00  | Excess surface organic matter                                               | 1.00<br> 1.00<br> 1.00<br> <br> <br> 1.00 | <br> Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Seepage | <br> <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00 |
| 654:<br>Smithfha         | <br>  85<br> <br>                | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone                              | 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Slope                                  | <br> <br> 1.00<br> 0.92<br>               | <br> Very limited:<br>  Seepage<br>                                                          | <br> <br> 1.00<br>                             |
| 655:<br>Smithfha         | <br>  90<br> <br> <br>           | Slope                                                                                                                         | 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br>                              | <br> <br> <br> 1.00<br> 1.00<br>          | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                          | <br> <br> 1.00<br> 1.00<br>                    |
| 656:<br>Smokey Bay       | <br>  77<br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            |                                           | <br> Very limited:<br>  Depth to saturated zone<br> <br>                                     | <br> <br> 1.00<br> <br> <br>                   |
| 657:<br>Smokey Bay       | <br>  77<br> <br> <br>           | Depth to saturated zone Depth to bedrock Depth to cemented pan                                                                | 1.00<br> 1.00<br> 1.00<br> 0.37            | <br> Very limited:<br>  Slope<br>  Depth to saturated zone<br>  Seepage<br> | <br> 1.00<br> 1.00<br> 0.50<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Slope<br>                               | <br> 1.00<br> 0.37<br> <br>                    |
| 658:<br>Snowdance        | <br>  90<br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability | 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope     | 1.00                                      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>                             | <br> <br> 1.00<br> 1.00<br>                    |
| 659:<br>Soldotna         | <br>  90<br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity      | <br> -<br> 1.00<br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Seepage<br> <br> <br>                               | <br> <br> 1.00<br> <br> <br>              | <br> Very limited:<br>  Seepage<br> <br> <br>                                                | <br> <br> 1.00<br> <br> <br>                   |
| 660:<br>Soldotna         | <br>  90<br> <br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity      | 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                         | <br> <br> 1.00<br> 0.92<br> <br>          | <br> Very limited:<br>  Seepage<br> <br> <br>                                                | <br> <br> 1.00<br> <br> <br>                   |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name              | of                                 | <br>  Septic tank absorption fie<br>  (Alaska criteria)                                                                              | Sewage lagoons<br>  (Alaska criteria) |                                                          | <br>  Sanitary landfill (ar<br>  (Standard criteri |                                                          |                             |
|---------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------|-----------------------------|
|                                       | map<br>  unit<br> <br>             | :                                                                                                                                    | Value<br> <br>                        | Rating class and Illiniting features                     | Value                                              | Rating class and limiting features                       | Value                       |
| 661:<br>Soldotna                      | <br>    85<br> <br> <br> <br> <br> |                                                                                                                                      | 1.00<br> 1.00                         | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00<br>                        | <br> <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> <br> 1.00<br> 0.63<br> |
| 662:<br>Soldotna                      | <br>    85<br> <br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity  | 1.00<br> 1.00<br> 1.00                | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>                             | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>      |
| 663:<br>Soldotna, sandy<br>substratum | 80<br> <br> <br>                   | <br>                                                                                                                                 | 1.00<br> 1.00                         | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> <br> 1.00<br> 0.92                            | <br> <br> <br> Very limited:<br>  Seepage<br> <br> <br>  | <br> <br> 1.00<br>          |
| 664:<br>Soldotna, sandy<br>substratum | <br>    75<br> <br> <br> <br>      | Depth to saturated zone Filtering capacity                                                                                           | 1.00<br> 1.00                         | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> <br> 1.00<br> 1.00                       | <br> <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> <br> 1.00<br> 0.37<br> |
| 665:<br>Soldotna, sandy<br>substratum | <br>    80<br> <br> <br> <br> <br> | <br>  Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity | 1.00<br> 1.00<br> 1.00                | <br>                                                     | <br> <br> 1.00<br> 1.00<br>                        | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00     |
| 666: Soldotna, sandy substratum       | <br>    80<br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity             | 1.00<br> 1.00                         | <br> <br> Very limited:<br>  Seepage<br> <br> <br>       | <br> <br> 1.00<br> <br>                            | <br> <br> Very limited:<br>  Seepage<br> <br> <br> <br>  | <br> <br> 1.00<br> <br>     |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name              | of                               | Septic tank absorption fie<br>  (Alaska criteria)                                                                                        | lds                                  | Sewage lagoons<br>  (Alaska criteria)                    |                                  | Sanitary landfill (a<br>  (Standard crite                |                              |
|---------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------|----------------------------------|----------------------------------------------------------|------------------------------|
|                                       | map<br>  unit<br> <br> _         |                                                                                                                                          | Value<br> <br>                       | Rating class and limiting features                       | Value                            | Rating class and limiting features                       | Value                        |
| 667:<br>Soldotna, strongly<br>sloping | <br> <br>  45<br> <br> <br> <br> | <br> <br> Very limited:<br>  Depth to bedrock<br>  Depth to camented pan<br>  Depth to saturated zone<br>  Filtering capacity<br>  Slope | 1.00<br> 1.00                        | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00          | <br> <br> Very limited:<br>  Seepage<br>  Slope<br> <br> | <br> <br> 1.00<br> 0.16<br>  |
| Soldotna, gently sloping              | 40<br> <br> <br> <br>            | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity                 | <br> 1.00<br> 1.00<br> 1.00<br> 0.50 | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> 1.00<br> 0.32<br>           | <br> Very limited:<br>  Seepage<br> <br> <br>            | <br> 1.00<br>                |
| 668:<br>Soldotna, sandy<br>substratum | <br> <br>  55<br> <br> <br>      |                                                                                                                                          | 1.00<br> 1.00<br> 1.00               | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00          | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br> | <br> <br> 1.00<br> 1.00<br>  |
| Kenai                                 | 40<br> <br> <br> <br> <br>       | <br> Very limited:<br>  Slope<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone | 1.00<br> 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>           | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>       |
| 669:<br>Soldotna, sandy<br>substratum | <br> <br>  55<br> <br> <br>      | <br> <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity            | 1.00<br> 1.00                        | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>      | <br> <br> <br> 1.00<br> 0.92<br> | <br> <br> Very limited:<br>  Seepage<br> <br>            | <br> <br> <br> 1.00<br> <br> |
| Kenai                                 | 40<br> <br> <br> <br> <br>       | <br> Very limited:<br>  Restricted permeability<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone            | 1.00<br> 1.00                        | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 0.92<br>           | <br> Very limited:<br>  Seepage<br> <br> <br>            | <br> 1.00<br> <br>           |
| 670:<br>Soldotna                      | <br>  50<br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity      | 1.00<br> 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br>           | <br> Very limited:<br>  Seepage<br>  Slope<br>           | <br> 1.00<br> 0.63<br> <br>  |
| Kichatna                              | 40<br> <br> <br> <br> <br>       | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Slope<br>  Filtering capacity      | 1.00<br> 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>      | <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>      | <br> 1.00<br> 0.63<br> <br>  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct. of map                      | ! '                                                                                                                           | lds                         | Sewage lagoons<br>  (Alaska criteria)                                                                |                                          | Sanitary landfill (area)<br>(Standard criteria)                             |                                  |
|--------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------|----------------------------------|
|                          | unit                             |                                                                                                                               | Value<br> <br>              | Rating class and limiting features                                                                   | Value<br> <br>                           | Rating class and limiting features                                          | Value<br> <br>                   |
| 671:<br>Soldotna         | <br> <br>  50<br> <br> <br>      | Slope Depth to bedrock Depth to cemented pan Depth to saturated zone                                                          | 1.00<br> 1.00<br> 1.00      | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                             | <br> <br> <br> 1.00<br> 1.00<br> <br>    | <br> <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                    | <br> <br> 1.00<br> 1.00<br>      |
| Kichatna                 | <br>  40<br> <br> <br> <br>      | Depth to bedrock Depth to cemented pan Depth to saturated zone                                                                | 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br> <br>                                             | <br> -<br> 1.00<br> 1.00<br> -<br> -     | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                         | <br> 1.00<br> 1.00<br> <br> <br> |
| 672:<br>Soldotna         | <br>  55<br> <br> <br>           | Depth to cemented pan Depth to saturated zone                                                                                 | 1.00<br> 1.00               | <br> Very limited:<br>  Seepage<br> <br>                                                             | <br> <br> 1.00<br> <br>                  | <br> Very limited:<br>  Seepage<br> <br> <br>                               | <br> <br> 1.00<br> <br> <br>     |
| Nikolai                  | <br> 45<br> <br> <br> <br>       | zone   Subsidence   Depth to bedrock   Depth to cemented pan                                                                  | 1.00<br> <br> 1.00<br> 1.00 | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone | 1.00<br> <br> 1.00                       | Very limited:   Depth to saturated   zone   Seepage                         | <br> 1.00<br> <br> 1.00<br> <br> |
| 673:<br>Spenard          | <br> <br>  89<br> <br> <br> <br> | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>                                     | 1.00                                     | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            | <br> <br> 1.00<br> 1.00<br>      |
| 674:<br>Spenard          | <br>  67<br> <br> <br> <br>      | Depth to cemented pan                                                                                                         |                             | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope<br>                          | <br> 1.00<br> 1.00<br> 0.92<br>          | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>       | <br> <br> 1.00<br> 1.00<br>      |
| 675:<br>Spenard          | <br>  87<br> <br> <br> <br>      | Depth to cemented pan Slope                                                                                                   | 1.00                        | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to saturated zone<br>                          | <br> 1.00<br> 1.00<br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br> | <br> 1.00<br> 1.00<br> 0.63<br>  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name     | of                               | ! ' !                                                                                       |                                                    | Sewage lagoons<br>(Alaska criteria)                                                                   |                                                    | Sanitary landfill (area) (Standard criteria)                       |                                   |
|------------------------------|----------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------|-----------------------------------|
|                              | map<br>  unit<br> <br>           |                                                                                             | Value                                              | Rating class and limiting features                                                                    | Value<br> <br>                                     | Rating class and limiting features                                 | Value                             |
| 676:<br>Starichkof           | <br> <br>  60<br>                | <br> <br> Not rated<br>  Not rated; Fragments<br>  > 75mm                                   |                                                    | <br> <br> Not rated<br>  Not rated; Fragments<br>  > 75mm                                             | <br> <br> <br> <br>                                | <br> <br> Very limited:<br>  Ponding<br>                           | <br> <br> <br> 1.00               |
|                              | <br> <br> <br> <br>              | Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock             | 1.00<br> 1.00<br> <br> 1.00<br> 1.00               | Ponding Excess surface organic matter Depth to saturated zone Seepage                                 | 1.00<br> 1.00<br> <br> <br> 1.00<br> 0.50          | Depth to saturated zone                                            | 1.00<br> <br> <br> <br>           |
| Doroshin                     | <br>  35<br> <br> <br> <br> <br> | Very limited:                                                                               | <br> 1.00<br> <br> 1.00<br> 1.00<br> 1.00<br> 0.45 | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Seepage  | 1.00<br>                                           | <br> Very limited:<br>  Depth to saturated<br>  zone<br> <br> <br> | <br> 1.00<br> <br> <br> <br> <br> |
| 677:<br>Starichkof           | <br> <br>  75<br>                | <br> Not rated<br>  Not rated; Fragments                                                    |                                                    | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm                                                  | <br> <br> <br>                                     | <br> <br> Very limited:<br>  Ponding                               | <br> <br> <br> 1.00               |
|                              | <br> <br> <br> <br> <br> <br>    | > 75mm<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock | 1.00<br> 1.00<br> <br> 1.00<br> 1.00               |                                                                                                       | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50          | Depth to saturated zone                                            | <br> 1.00<br> <br> <br> <br> <br> |
| 678:<br>Starichkof           | <br>  82<br>                     | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm                                        |                                                    | <br> Not rated<br>  Not rated; Fragments<br>  > 75mm                                                  | <br> <br> <br>                                     | <br> Very limited:<br>  Ponding                                    | 1.00                              |
|                              | <br> <br> <br> <br> <br>         | Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock             | 1.00<br> 1.00<br> <br> 1.00<br> 1.00               | Ponding<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Slope               | 1.00<br> 1.00<br> <br> 1.00<br> <br> 1.00<br> 0.68 | Depth to saturated zone                                            | 1.00<br> <br> <br> <br>           |
| 679:<br>Starichkof, forested | <br> <br>  85<br>                | <br> <br> Not rated<br>  Not rated; Fragments                                               |                                                    | <br> <br> Not rated<br>  Not rated; Fragments                                                         | <br> <br> <br>                                     | <br> <br> Very limited:<br>  Ponding                               | <br> <br> <br> 1.00               |
|                              | <br> <br> <br> <br> <br>         | > 75mm<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock | <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00          | > 75mm<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Seepage | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50          | <br>  Depth to saturated zone<br> <br> <br> <br>                   | <br> 1.00<br> <br> <br> <br>      |
| 680:<br>Starichkof           | <br> <br>  45<br>                | <br> <br> Not rated<br>  Not rated; Fragments                                               | <br> <br> <br>                                     | <br> <br> Not rated<br>  Not rated; Fragments                                                         | <br> <br> <br>                                     | <br> <br> Very limited:<br>  Ponding                               | <br> <br> <br> 1.00               |
|                              | <br> <br> <br> <br> <br>         | > 75mm<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Subsidence<br>  Depth to bedrock | <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00          | > 75mm<br>  Ponding<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Seepage | <br> 1.00<br> 1.00<br> <br> 1.00<br> 0.50          | Depth to saturated zone                                            | i                                 |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct. of map                 | !                                                                            | lds                                                 | Sewage lagoons<br>  (Alaska criteria)                                 |                                  | Sanitary landfill (area<br>  (Standard criteria)                                                        | 1)                                                      |
|--------------------------|-----------------------------|------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|                          | map<br>  unit<br>           |                                                                              | Value<br> <br> <br>                                 | Rating class and limiting features                                    | Value<br> <br>                   | Rating class and limiting features                                                                      | Value<br> <br>                                          |
| 680:<br>Slikok           | <br> 30<br> <br> <br> <br>  | Ponding Depth to saturated zone                                              | 1.00<br> 1.00<br> 1.00<br> <br> <br> 1.00           | Excess surface<br>  organic matter                                    | 1.00<br> 1.00<br> <br> <br> 1.00 | <br> Very limited:<br>  Flooding<br>  Ponding<br>  Depth to saturated<br>  zone<br>  Seepage<br>  Slope | <br> <br> 1.00<br> 1.00<br> 1.00<br> <br> 1.00<br> 0.16 |
| Naptowne                 | <br>  25<br> <br> <br>      | Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Slope<br>                        | <br> <br> 1.00<br> 0.68<br>      | <br> Very limited:<br>  Seepage<br> <br>                                                                | <br> <br> 1.00<br> <br>                                 |
| 681:<br>Starichkof       | 50                          | Depth to saturated zone Subsidence                                           | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00 | organic matter Depth to saturated zone                                | Pond<br> <br> 1.00<br> 1.00<br>  | <br> Very limited:<br> ing<br> <br>  Depth to saturated zone<br> <br> <br>                              | <br> 1.00<br> <br> 1.00<br> <br> <br>                   |
| Spenard                  | <br>  42<br> <br> <br>      | Depth to saturated zone                                                      | 1.00<br> 1.00<br> 1.00                              | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br> <br> | <br> 1.00<br> 1.00<br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>                                   | <br> 1.00<br> 1.00<br>                                  |
| 682:<br>Susitna          | <br> <br>  85<br> <br> <br> | Depth to cemented pan Depth to saturated zone Filtering capacity             | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br> <br> <br> <br>                    | <br> <br> 1.00<br> <br> <br>     | <br> Somewhat limited:<br>  Flooding<br> <br> <br> <br>                                                 | <br> <br> 0.40<br> <br> <br>                            |
| Riverwash                | 5                           | l<br> Not rated                                                              | <br> <br>                                           | <br> Not rated                                                        | <br>                             | <br> Not rated                                                                                          | <br>                                                    |
| 683:<br>Susitna          | <br>  85<br> <br> <br> <br> |                                                                              | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                   | <br> <br> 1.00<br> 0.92<br> <br> | <br> Somewhat limited:<br>  Flooding<br> <br> <br> <br>                                                 | <br> <br> 0.40<br> <br> <br>                            |
| 684:<br>Talkeetna        | <br>  94<br> <br> <br> <br> | Depth to cemented pan Depth to saturated zone                                |                                                     | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                   | <br> <br> 1.00<br> 0.32<br> <br> | <br> Not limited<br>   <br>   <br>   <br>                                                               | <br> <br> <br> <br> <br> <br>                           |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name     | Pct.<br>of map                             | ! ' '                                                                                                                                    | lds                                                 | Sewage lagoons<br>  (Alaska criteria)                                                                                     |                                           | Sanitary landfill (area) (Standard criteria)                                |                                       |  |
|------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------|--|
|                              | map<br>  unit<br> <br>                     |                                                                                                                                          | Value<br> <br>                                      | Rating class and limiting features                                                                                        | Value<br> <br>                            | Rating class and limiting features                                          | Value<br> <br>                        |  |
| 685:<br>Talkeetna            | <br> <br>  90<br> <br> <br> <br> <br>      |                                                                                                                                          | 1.00<br> 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                                            | <br> <br> 1.00<br> 1.00<br> <br> <br>     | <br> <br> Very limited:<br>  Slope<br> <br>                                 | <br> <br> 1.00<br> <br> <br> <br>     |  |
| 686:<br>Talkeetna            | <br>  55<br> <br> <br> <br> <br>           | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 1.00                     | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                                       | <br> <br> 1.00<br> 1.00<br> <br> <br>     | <br> Very limited:<br>  Slope<br> <br> <br> <br>                            | <br> <br> 1.00<br> <br> <br>          |  |
| Starichkof                   | <br>  40<br> <br> <br> <br> <br> <br> <br> | zone<br>Subsidence                                                                                                                       | <br> <br> <br> 1.00<br> 1.00<br> <br> 1.00<br> 1.00 | Not rated   Not rated; Fragments   > 75mm   Ponding   Excess surface   organic matter   Depth to saturated zone   Seepage | <br> <br> 1.00<br> 1.00<br>               | <br> Very limited:<br>  Ponding<br>  Depth to saturated zone<br> <br>       | <br> 1.00<br> <br> 1.00<br> <br> <br> |  |
| 687:<br>Tangerra             | <br> <br>  80<br> <br> <br>                | Depth to cemented pan                                                                                                                    | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope                                                   | <br> <br> <br> 1.00<br> 1.00<br> 0.08     | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br> <br>  | <br> <br> 1.00<br> 1.00               |  |
| 688:<br>Beaches, tidal flats | <br> <br>  90                              | <br> <br> Not rated<br>                                                                                                                  | <br> <br> <br>                                      | <br> <br> Not rated<br>                                                                                                   | <br> <br> <br>                            | <br> <br> Not rated<br>                                                     |                                       |  |
| 689:<br>Tlikakila            | <br>  90<br> <br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>                                                          | <br> <br> 1.00<br> 1.00<br> <br>          | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            | <br> <br> 1.00<br> 1.00<br>           |  |
| 690:<br>Tlikakila            | <br>  87<br> <br> <br> <br>                | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Filtering capacity                 | 1.00<br> 1.00                                       | <br> Very limited:<br>  Seepage<br>  Depth to saturated zone<br>  Slope                                                   | <br> <br> 1.00<br> 1.00<br> 0.92          | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>            | <br> <br> 1.00<br> 1.00<br>           |  |
| 691:<br>Tlikakila            | <br>  85<br> <br> <br> <br> <br> <br>      | Depth to cemented pan Slope                                                                                                              | 1.00<br> 1.00                                       | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to saturated zone<br>                                               | <br> <br> <br> 1.00<br> 1.00<br> 1.00<br> | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br> | <br> <br> 1.00<br> 1.00<br> 0.63<br>  |  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map           | ! ' '                                                                                                                                    | lds                             | Sewage lagoons<br>  (Alaska criteria)                                                                |                                       | Sanitary landfill (a<br>  (Standard criter                           |                                  |
|--------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------|----------------------------------|
|                          | unit                        |                                                                                                                                          | Value<br> <br>                  | Rating class and limiting features                                                                   | Value<br> <br>                        | Rating class and Imiting features                                    | Value                            |
| 692:<br>Tokositna        | <br>   85<br> <br> <br>     | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00          | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                                                  | <br> <br> 1.00<br> 0.08<br>           | <br> <br> Very limited:<br>  Seepage<br> <br>                        | <br> <br> 1.00<br> <br>          |
| 693:<br>Tokositna        | <br>  90<br> <br> <br>      | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability            | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                                                  | <br> <br> <br> 1.00<br> 0.92<br> <br> | <br> Very limited:<br>  Seepage<br> <br> <br>                        | <br> <br> 1.00<br> <br>          |
| 694:<br>Tokositna        | 90                          | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Restricted permeability<br>  Slope | 1.00<br> 1.00<br> 1.00          | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                  | <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br>                       | <br> 1.00<br> 0.16<br>           |
| 695:<br>Truuli           | <br>  88<br> <br> <br>      | zone                                                                                                                                     | 1.00<br> <br> 1.00              | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Seepage<br>  Depth to saturated zone | <br> <br> 1.00<br> <br> 1.00<br> 1.00 | <br> Very limited:<br>  Depth to saturated<br>  zone<br>  Seepage    | <br> 1.00<br> <br> 1.00          |
| 696:<br>Tutka            | <br>  45<br> <br> <br> <br> |                                                                                                                                          | 1.00<br> 1.00<br> 1.00<br> 1.00 | Slope                                                                                                | <br> <br> 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to bedrock<br> | <br> <br> 1.00<br> 1.00<br> 1.00 |
| Kasitsna                 | 40<br> <br> <br> <br> <br>  |                                                                                                                                          | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                  | <br> <br> 1.00<br> 1.00<br> <br>      | <br> Very limited:<br>  Slope<br> <br> <br> <br>                     | <br> 1.00<br> <br> <br>          |
| Rock outcrop             | 15                          | <br> Not rated                                                                                                                           |                                 | <br> Not rated                                                                                       | <br>                                  | <br> Not rated                                                       |                                  |
| 697:<br>Tutka            | <br>  55<br> <br> <br>      | Depth to bedrock                                                                                                                         |                                 | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Seepage<br>                            | <br> <br> 1.00<br> 1.00<br> 1.00      | <br> Very limited:<br>  Slope<br>  Seepage<br>  Depth to bedrock<br> | <br> <br> 1.00<br> 1.00<br> 1.00 |
| Portgraham               | 30<br> <br> <br> <br>       | Depth to bedrock                                                                                                                         | 1.00<br> 1.00<br> 1.00<br> 1.00 | <br> Very limited:<br>  Depth to hard bedrock<br>  Slope<br>  Seepage<br>                            | <br> 1.00<br> 1.00<br> 1.00<br> 1.00  | <br> Very limited:<br>  Slope<br>  Depth to bedrock<br>  Seepage<br> | <br> 1.00<br> 1.00<br> 1.00      |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name    | Pct. of map                      | ! ' '                                                                                                 | lds                                                | Sewage lagoons<br>(Alaska criteria)                                            |                                        | Sanitary landfill (area) (Standard criteria)                                   |                                   |  |
|-----------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------|-----------------------------------|--|
|                             | unit<br> <br>                    |                                                                                                       | Value<br> <br>                                     | Rating class and limiting features                                             | Value<br> <br>                         | Rating class and limiting features                                             | Value                             |  |
| 698:<br>Tuxedni             | <br> <br> 85<br> <br>            | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan | 1.00<br> 1.00                                      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope        | <br> <br> 1.00<br> 1.00<br> 0.32       | <br> <br> Very limited:<br>  Depth to saturated zone<br>  Seepage              | <br> <br> 1.00<br> 1.00           |  |
| 699:<br>Tuxedni             | <br> <br>  85<br> <br> <br> <br> | Depth to cemented pan                                                                                 | 1.00<br> 1.00                                      | <br> Very limited:<br>  Slope<br>  Depth to saturated zone<br>  Seepage<br>    | 1.00                                   | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope<br>    | <br> <br> 1.00<br> 1.00<br> 0.63  |  |
| 700:<br>Tuxedni, warm       | <br>  85<br> <br> <br>           | <br> Very limited:<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan      | 1.00<br> 1.00                                      | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>  Slope        | <br> <br> 1.00<br> 1.00<br> 0.32       | <br> Very limited:<br>  Depth to saturated zone<br>  Seepage<br>               | <br> <br> 1.00<br> 1.00           |  |
| 701:<br>Typic Cryaquents    | <br>  95<br> <br> <br> <br>      | Flooding<br>  Depth to saturated zone<br>  Depth to bedrock<br>  Depth to cemented pan                | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Seepage<br> | 1.00                                   | <br> Very limited:<br>  Flooding<br>  Depth to saturated zone<br>  Seepage<br> | <br> 1.00<br> 1.00<br> 1.00<br>   |  |
| 702:<br>Typic Cryopsamments | <br>  84<br> <br> <br> <br> <br> | Depth to cemented pan Depth to saturated zone                                                         | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Seepage<br>  Slope<br>                                 | <br> <br> <br> 1.00<br> 1.00<br> <br>  | <br> Very limited:<br>  Seepage<br>  Slope<br>                                 | <br> <br> 1.00<br> 1.00<br> <br>  |  |
| 703:<br>Typic Cryorthents   | <br>  80<br> <br> <br> <br>      |                                                                                                       | 1.00<br> 1.00<br> 1.00<br> 1.00                    | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                            | <br> <br> <br> 1.00<br> 1.00<br> <br>  | <br> Very limited:<br>  Slope<br> <br> <br>                                    | <br> <br> 1.00<br> <br> <br>      |  |
| 704:<br>Urban land          | <br> <br>  85                    | <br> <br> Not rated<br>                                                                               | <br> <br> <br>                                     | l<br> <br> Not rated<br>                                                       | <br> <br> <br>                         | <br> <br> Not rated<br>                                                        |                                   |  |
| 705:<br>Water, fresh        | <br> <br> 100                    | I<br> <br> Not rated<br>                                                                              | <br> <br> <br>                                     | I<br> <br> Not rated<br>                                                       | <br> <br> <br>                         | <br> <br> Not rated<br>                                                        |                                   |  |
| 706:<br>Whitsol             | <br>  90<br> <br> <br> <br> <br> | Depth to saturated zone Filtering capacity                                                            | <br> <br> 1.00<br> 1.00<br> 1.00<br> 0.50<br> 0.29 | <br> Very limited:<br>  Seepage<br> <br> <br>                                  | <br> <br> 1.00<br> <br> <br> <br> <br> | <br> Very limited:<br>  Seepage<br> <br> <br> <br>                             | <br> <br> 1.00<br> <br> <br> <br> |  |

Table 20. Sanitary Facilities: Sewage Treatement and Landfill—Continued

| Map symbol and soil name | Pct.<br>of<br>map               | ! ' '                                                                                                                                                 | lds                                                | <br>  Sewage lagoons<br>  (Alaska criteria)                                                              |                                            | <br>  Sanitary landfill (ar<br>  (Standard criteri                      |                                   |
|--------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------|-----------------------------------|
|                          | unit                            |                                                                                                                                                       | Value<br> <br>                                     | Rating class and limiting features                                                                       | Value<br> <br>                             | Rating class and limiting features                                      | Value                             |
| 707:<br>Whitsol          | 90<br> <br> <br> <br>           |                                                                                                                                                       | 1.00<br> 1.00<br> 1.00<br> 0.50                    | <br> <br> Very limited:<br>  Seepage<br>  Slope<br>                                                      | <br> <br> 1.00<br> 0.92<br> <br>           | <br> <br> Very limited:<br>  Seepage<br> <br> <br>                      | <br> <br> 1.00<br> <br>           |
| 708:<br>Whitsol          | <br>  85<br> <br> <br> <br>     |                                                                                                                                                       | 1.00<br> 1.00                                      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                                                      | <br> <br> <br> 1.00<br> 1.00<br> <br> <br> | <br> Very limited:<br>  Seepage<br>  Slope<br> <br>                     | <br> 1.00<br> 0.63<br> <br>       |
| 709:<br>Whitsol          | <br>    85<br> <br> <br> <br>   | Depth to cemented pan Depth to saturated zone                                                                                                         | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                           | <br> <br> 1.00<br> 1.00<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br>                          | <br> 1.00<br> 1.00<br>            |
| 710:<br>Whitsol          | <br>  85<br> <br> <br>          |                                                                                                                                                       | 1.00<br> 1.00<br> 1.00                             | <br> Very limited:<br>  Slope<br>  Seepage<br>                                                           | <br> <br> 1.00<br> 1.00<br> <br> <br>      | <br> Very limited:<br>  Slope<br>  Seepage<br> <br>                     | <br> 1.00<br> 1.00<br>            |
| 711:<br>Whitsol          | <br> 55<br> <br> <br>           | <br> Very limited:<br>  Depth to bedrock<br>  Depth to cemented pan<br>  Depth to saturated zone<br>  Filtering capacity<br>  Restricted permeability | 1.00<br> 1.00<br> 1.00<br> 0.50                    | <br> Very limited:<br>  Seepage<br>  Slope<br>                                                           | <br> <br> 1.00<br> 0.68<br> <br>           | <br> Very limited:<br>  Seepage<br> <br> <br> <br>                      | <br> 1.00<br> <br> <br>           |
| Doroshin                 | 30<br> <br> <br> <br> <br> <br> |                                                                                                                                                       | <br> 1.00<br> <br> 1.00<br> 1.00<br> 1.00<br> 0.45 | <br> Very limited:<br>  Excess surface<br>  organic matter<br>  Depth to saturated zone<br>  Seepage<br> | <br> 1.00<br> 1.00<br> 1.00<br> 0.50<br>   | <br> Very limited:<br>  Depth to saturated<br>  zone<br> <br> <br> <br> | <br> 1.00<br> <br> <br> <br> <br> |

## Table 21. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name            | Percent of map | Potential source of grav<br>(Alaska criteria)         | /el                 | Potential source of (Alaska criteria                 |                |
|-------------------------------------|----------------|-------------------------------------------------------|---------------------|------------------------------------------------------|----------------|
|                                     | unit           | Rating class and Imiting features                     | Value<br> <br>      | Rating class and limiting features                   | Value          |
| 501:<br>Aquic Cryofluvents          | 85<br>         | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Sand source                                |                |
| i02:<br>Aquic Cryofluvents, shallow | 80<br>         | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> <br> Sand source<br>                            |                |
| 503:<br>Badland, sea cliffs         | <br>  100      | <br> <br> Not rated<br>                               |                     | <br> <br> Not rated<br>                              |                |
| 504:<br>Badland, sea cliffs         | 55             | <br> Not rated                                        |                     | <br> Not rated                                       |                |
| Typic Cryorthents                   | 45<br>         | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| i05:<br>Beaches                     | 90             | <br> <br> Not rated<br>                               |                     | <br> <br> Not rated                                  |                |
| 506:<br>Beluga                      | 85<br>         | <br>                                                  | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 507:<br>Belug <b>a</b>              | 87             | <br>  <br> Improbable:<br>  Bottom layer not a source | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| :08:<br>Beluga                      | 87<br>         | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| :09:<br>Beluga                      | 55<br>         | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00           |
| Mutnala                             | 40             | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | <br> <br> 0.00 |
| i10:<br>Beluga                      | 60<br>         | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00           |
| Smokey Bay                          | 37             | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| i11:<br>Beluga                      | 50<br>         | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00           |
| Smokey Bay                          | 47<br>         | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | <br> <br> 0.00 |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name              | Percent<br>  of   | Potential source of grav (Alaska criteria)            | vel                 | Potential source of sand (Alaska criteria)           |                     |
|---------------------------------------|-------------------|-------------------------------------------------------|---------------------|------------------------------------------------------|---------------------|
|                                       | map<br>  unit<br> | Rating class and limiting features                    | Value               | Rating class and limiting features                   | Value<br> <br>      |
| 512:<br>Benka                         | 86<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Sand source                                |                     |
| :13:<br>Benka                         | 90<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Sand source<br>                            |                     |
| 14:<br>Benka                          | <br>   85<br>     | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> <br> Sand source<br>                            |                     |
| 15:<br>Benka                          | 90<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Sand source<br>                            |                     |
| 16:<br>Benka                          | 95<br>            | <br>                                                  | 0.00                | <br> Sand source<br>                                 |                     |
| :17:<br>Benka, strongly sloping       | <br>  45<br>      | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Sand source<br>                            |                     |
| Benka, gently sloping                 | 40                | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Sand source<br>                                 |                     |
| 18:<br>Boxcar                         | <br>   75<br>     | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 19:<br>Boxcar                         | 80<br>            | <br>                                                  | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 20:<br>Boxcar                         | 85<br>            | <br>                                                  | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 321:<br>Boxcar, cool                  | 80<br>            | <br> -<br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 322:<br>Boxcar, cool                  | 80<br>            | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| :23:<br>Chenega                       | 85<br>            | <br>  <br> Improbable:<br>  Bottom layer not a source | 0.00                | <br> Probable:<br>  Bottom layer not a source        | 0.00                |
| 24:<br>Chenega, cool                  | 90<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Probable:<br>  Bottom layer                | 0.83                |
| 325:<br>Chenega, occasionally flooded | <br>   85<br>     | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> Probable:<br>  Bottom layer                     | <br> <br> <br> 0.83 |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name | Percent<br>  of        | Potential source of grav                                          | /el                 | Potential source of sand (Alaska criteria)                        |                     |  |
|--------------------------|------------------------|-------------------------------------------------------------------|---------------------|-------------------------------------------------------------------|---------------------|--|
|                          | map<br>  unit<br> <br> | Rating class and limiting features                                | Value<br> <br>      | Rating class and limiting features                                | Value               |  |
| 526:<br>Chulitna         | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |  |
| 527:<br>Chulitna         | 80<br>                 | <br>                                                              | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |  |
| 28:<br>Chulitna          | 85<br>                 | <br>                                                              | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| 29:<br>Chulitna          | 85<br>                 | <br>                                                              | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| :30:<br>Chunilna         | 92<br>                 | <br>                                                              | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| 31:<br>Chunilna          | 82<br>                 | <br>                                                              | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| 32:<br>Chunilna, cool    | <br>  80<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source             | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| 33:<br>Chunilna, cool    | <br>  85<br>           | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| 34:<br>Clam Gulch        | <br>  85<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source             | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| 335:<br>Clunie           | <br>  90<br>           | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  |  |
| 336:<br>Coal Creek       | <br> <br>  75<br>      | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |  |
| 37:<br>Coal Creek        | <br>   88<br>          | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |  |
| 38:<br>Coal Creek        | <br>   88<br>          | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |  |
| 539:<br>Cohoe            | 87<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name             | Percent<br>  of   | Potential source of grav (Alaska criteria)            | /el                 | Potential source of sand (Alaska criteria)           |                |
|--------------------------------------|-------------------|-------------------------------------------------------|---------------------|------------------------------------------------------|----------------|
|                                      | map<br>  unit<br> | Rating class and limiting features                    | Value               | Rating class and limiting features                   | Value          |
| 540:<br>Cohoe                        | <br> <br>  85<br> | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00 |
| 541:<br>Cohoe                        | 89<br> <br>       | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00 |
| 42:<br>Cohoe                         | 93<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00           |
| 543:<br>Cohoe                        | <br>  80<br>      | <br> -<br> Improbable:<br>  Bottom layer not a source | <br> <br> <br> 0.00 | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 544:<br>Cohoe                        | <br>  84<br>      | <br> -<br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 545:<br>Cohoe, dry                   | <br>  87<br>      | <br> -<br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 546:<br>Cohoe, dry                   | <br>  85<br>      | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | <br> <br> 0.00 |
| 647:<br>Cohoe, dry                   | <br>  89<br>      | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | <br> <br> 0.00 |
| 648:<br>Cohoe, dry                   | 93<br>            | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 549:<br>Cohoe, dry                   | <br>  80<br>      | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 550:<br>Cohoe, dry                   | <br>  84<br>      | <br> -<br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| 551:<br>Cohoe, moderately steep      | 45<br>            | <br>                                                  | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| Cohoe, gently sloping                | 40<br>            | <br> Improbable:<br>  Bottom layer not a source<br>   | <br> 0.00           | Improbable:<br>  Bottom layer not a source           | <br> 0.00      |
| 552:<br>Cohoe, dry, moderately steep | <br>  45<br>      | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00           |
| Cohoe, dry, gently sloping           | 40                | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | Improbable:<br>  Bottom layer not a source           | 0.00           |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name | Percent<br>  of   | nt   Potential source of gravel  <br>  (Alaska criteria)               |                              | Potential source of sand (Alaska criteria)                             |                              |  |
|--------------------------|-------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------|------------------------------|--|
|                          | map<br>  unit<br> | Rating class and limiting features                                     | Value                        | Rating class and limiting features                                     | Value                        |  |
| 553:<br>Cohoe, dry       | 55<br>            | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00               | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         |  |
| Kenai                    | 30                | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         |  |
| 554:<br>Cohoe, dry       | <br>  55<br>      | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00               | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         |  |
| Kenai                    | 30                | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |  |
| 555:<br>Cohoe, dry       | 70<br>            | <br>  <br> Improbable:<br>  Bottom layer not a source                  | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         |  |
| Nikolai                  | 30                | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00           | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00           |  |
| 556:<br>Cohoe, dry       | 70<br>            | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          |  |
| Nikolai                  | 30<br> <br>       | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      |  |
| 557:<br>Cytex Creek      | <br> <br> 75<br>  | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          | <br> <br> Probable:<br>  Bottom layer                                  | <br> <br> <br> 0.14          |  |
| 558:<br>Doroshin         | <br>   83<br>     | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00      |  |
| 559:<br>Doroshin         | 79<br> <br>       | <br>                                                                   | <br> <br> <br> 0.00<br> 0.00 |                                                                        | <br> <br> <br> 0.00<br> 0.00 |  |
| 560:<br>Dystrocryepts    | 50<br>            | <br> <br> Gravel source<br>                                            | <br> <br>                    | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          |  |
| Typic Cryorthents        | 30<br>            | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |  |
| Iliamna, cool            | 20<br>            | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |  |
| 561:<br>Foreland         | 79<br>            | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00               | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name | Percent<br>  of        | Potential source of gravel (Alaska criteria)                          |                     | Potential source of sand (Alaska criteria)                        |                     |
|--------------------------|------------------------|-----------------------------------------------------------------------|---------------------|-------------------------------------------------------------------|---------------------|
|                          | map<br>  unit<br> <br> | Rating class and Imiting features                                     | Value<br> <br>_ _   | Rating class and Imiting features                                 | Value<br> <br>      |
| 562:<br>Foreland         | <br> <br>   59<br>     | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |
| Soldotna                 | 20                     | <br> Improbable:<br>  Bottom layer not a source                       | 0.00                | <br> Probable:<br>  Bottom layer                                  | 0.80                |
| Starichkof               | 20<br> <br> <br>       | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source<br> | <br> 0.00<br> 0.00  | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  |
| 63:<br>Pits, gravel      | <br>  95<br>           | <br> Not rated<br>                                                    | İ                   | <br> Not rated<br>                                                | İ                   |
| 64:<br>liamna            | 80<br>                 | <br> Improbable:<br>  Bottom layer not a source                       | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |
| 65:<br>iamna             | <br>  82<br>           | <br> <br> Improbable:<br>  Bottom layer not a source                  | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                |
| 66:<br>iamna             | 80<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |
| 67:<br>iamna, cool       | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |
| 68:<br>sland             | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |
| 69:<br>sland             | 91<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                |
| 70:<br>sland             | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |
| 71:<br>sland             | <br>  92<br>           | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                |
| 72:<br>sland, forested   | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |
| 73:<br>achemak           | 80<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |
| 74:<br>Kachemak          | <br> <br>  80<br>      | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name  | Percent of             | Potential source of grav (Alaska criteria)            | vel                 | Potential source of (Alaska criteria                 |                     |
|---------------------------|------------------------|-------------------------------------------------------|---------------------|------------------------------------------------------|---------------------|
|                           | map<br>  unit<br> <br> | Rating class and I limiting features                  | Value               | Rating class and limiting features                   | Value<br> <br>      |
| 575:<br>Kachemak          | <br>   80<br>          | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> <br> 0.00 |
| 76:<br>Kachemak           | <br>  80<br>           | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 577:<br>Kachemak          | <br>  90<br>           | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 378:<br>Kachemak, cool    | <br>  80<br>           | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 579:<br>Kachemak, cool    | 80<br>                 | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00                | <br>                                                 | <br> <br> 0.00      |
| 880:<br>Kachemak, cool    | 80<br>                 | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 581:<br>Kachemak, cool    | 80<br>                 | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 82:<br>Kachemak, cool     | 80                     | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 83:<br>Kachemak, forested | 75<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 84:<br>Kachemak, forested | <br>  85<br>           | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 85:<br>Kachemak, forested | 80<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 886:<br>Kachemak, cool    | 60<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> <br> 0.00 |
| Snowdance                 | 40<br> <br>            | <br> Improbable:<br>  Bottom layer not a source<br>   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source<br>  | <br> <br> 0.00      |
| 87:<br>Kachemak, cool     | 65<br>                 | <br> Improbable:<br>  Bottom layer not a source       | 0.00                | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| Snowdance                 | 35<br>                 | <br> Improbable:<br>  Bottom layer not a source       | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name           | Percent of map    | Potential source of grav<br>(Alaska criteria)            | /el                 | Potential source of (Alaska criteria                 |                     |
|------------------------------------|-------------------|----------------------------------------------------------|---------------------|------------------------------------------------------|---------------------|
|                                    | map               | Rating class and limiting features                       | Value<br> <br>_ _   | Rating class and limiting features                   | Value               |
| 588:<br>Kachemak, cool             | 70<br>            | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| Snowdance                          | 30                | <br> Improbable:<br>  Bottom layer not a source          | 0.00                | Improbable:<br>  Bottom layer not a source           | 0.00                |
| 89:<br>Kalifonsky                  | 83<br>            | <br> <br> Improbable:<br>  Bottom layer not a source<br> | <br> <br> <br> 0.00 | <br> Sand source<br>                                 |                     |
| 90:<br>Kalifonsky                  | 85                | <br> Improbable:<br>  Bottom layer not a source          | 0.00                | <br> Sand source<br>                                 |                     |
| 91:<br>Kalifonsky                  | 50<br>            | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Sand source<br>                            |                     |
| Typic Cryorthents                  | 30                | <br> Improbable:<br>  Bottom layer not a source          | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source      | 0.00                |
| 92:<br>Karluk                      | 80<br>            | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 93:<br>Kashwitna                   | 85<br>            | <br>  <br> Improbable:<br>  Bottom layer not a source    | 0.00                | <br> Sand source<br>                                 |                     |
| 94:<br>Kashwitna                   | <br>  88<br>      | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Sand source<br>                            |                     |
| 95:<br>Kashwitna                   | 85<br>            | <br>                                                     | <br> <br> <br> 0.00 | <br> <br> Sand source<br>                            |                     |
| 96:<br>Kashwitna, moderately steep | 50                | <br> -<br> Improbable:<br>  Bottom layer not a source    | <br> <br> <br> 0.00 | <br> Sand source<br>                                 |                     |
| Kashwitna, strongly sloping        | 40<br>            | <br> Improbable:<br>  Bottom layer not a source          | 0.00                | <br> Sand source<br>                                 |                     |
| 97:<br>Kenai                       | <br>  81<br>      | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 98:<br>Kenai                       | 82<br>            | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | 0.00                |
| 99:<br>Kenai                       | <br> <br>  85<br> | <br> <br> Improbable:<br>  Bottom layer not a source     | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source | <br> <br> <br> 0.00 |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name        | Percent<br>  of        | Potential source of grav<br>(Alaska criteria)                     | vel                 | Potential source of sand (Alaska criteria)                        |                    |  |
|---------------------------------|------------------------|-------------------------------------------------------------------|---------------------|-------------------------------------------------------------------|--------------------|--|
|                                 | map<br>  unit<br> <br> | Rating class and limiting features                                | Value               | Rating class and limiting features                                | Value              |  |
| 600:<br>Kenai                   | 88                     | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00               |  |
| 601:<br>Kenai                   | <br>  86<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source<br>         | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00     |  |
| 002:<br>Kenai, moderately steep | <br>   45<br>          | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| Kenai, gently sloping           | 40                     | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00     |  |
| 603:<br>Kenai                   | 60<br>                 | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| Starichkof                      | 31                     | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00 |  |
| S04:<br>Kichatna                | 70                     | <br> Gravel source<br>                                            |                     | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| 805:<br>Kichatna                | 75<br>                 | <br> Gravel source<br>                                            |                     | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| s06:<br>Kichatna                | 75<br>                 | <br> -<br> Gravel source<br> -                                    | <br> <br>           | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| 807:<br>Kichatna                | 85<br>                 | <br> -<br> Gravel source<br> -                                    |                     | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| S08:<br>Kichatna                | 70<br>                 | <br> -<br> Gravel source<br> -                                    |                     | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| 809:<br>Kichatna                | 50                     | <br> <br> Gravel source<br>                                       |                     | <br> Improbable:<br>  Bottom layer not a source                   | 0.00               |  |
| Killey                          | 50                     | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Probable:<br>  Bottom layer<br>                              | <br> <br> 0.91     |  |
| 810:<br>Kidazqeni               | <br>  85<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source             | <br> <br> 0.00      | <br> Probable:<br>  Bottom layer                                  | 0.34               |  |
| 511:<br>Killey                  | 45<br>                 | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Probable:<br>  Bottom layer                                  | <br> <br> 0.91     |  |
| Moose River                     | 45<br>                 | l<br> Improbable:<br>  Bottom layer not a source                  | <br> <br> 0.00      | <br> Probable:<br>  Bottom layer                                  | 0.43               |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name    | Percent<br>  of        | Potential source of grav<br>  (Alaska criteria)                                 | ⁄el                     | Potential source of sand (Alaska criteria)                                      |                         |  |
|-----------------------------|------------------------|---------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------|-------------------------|--|
|                             | map<br>  unit<br> <br> | Rating class and Imiting features                                               | Value                   | Rating class and limiting features                                              | Value<br> <br>          |  |
| 612:<br>Liten               | <br> <br>  85<br>      | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> <br> 0.00     | <br> <br> Sand source<br>                                                       |                         |  |
| 13:<br>_ithic Haplocryands  | <br>  55<br> <br>      | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet | <br> <br> 0.00<br> 0.00 |  |
| Alic Haplocryands           | 20<br> <br>            | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source | <br> 0.00<br> 0.00      | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet | <br> 0.00<br> 0.00      |  |
| Rock outcrop                | 17                     | <br> Not rated                                                                  |                         | <br> Not rated                                                                  |                         |  |
| 614:<br>Lithic Haplocryands | <br>   55<br> <br>     | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet | <br> <br> 0.00<br> 0.00 |  |
| Alic Haplocryands           | 20<br> <br>            | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source | <br> 0.00<br> 0.00      | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet | <br> 0.00<br> 0.00      |  |
| Rock outcrop                | 20                     | l<br> Not rated                                                                 |                         | <br> Not rated                                                                  |                         |  |
| :15:<br>Longmare            | 80<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> <br> 0.00     | <br> <br> Improbable:<br>  Bottom layer not a source                            | 0.00                    |  |
| :16:<br>Longmare            | 80<br>                 | <br> -<br> Improbable:<br>  Bottom layer not a source                           | <br> <br> <br> 0.00     | <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> 0.00          |  |
| 317:<br>Mutnala             | <br>  75<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source                           | <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> 0.00          |  |
| 818:<br>Mutnala             | <br>  80<br>           | <br> -<br> Improbable:<br>  Bottom layer not a source                           | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                                 | 0.00                    |  |
| 319:<br>Mutnala             | 85<br>                 | <br>  <br> Improbable:<br>  Bottom layer not a source                           | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                                 | 0.00                    |  |
| 320:<br>Mutnala             | <br>   85<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                            | 0.00                    |  |
| 321:<br>Mutnala             | <br>   85<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> <br> 0.00     | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> <br> 0.00     |  |
| 622:<br>Mutnala             | <br>   85<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                            | 0.00                    | <br> <br> Improbable:<br>  Bottom layer not a source                            | <br> <br> <br> 0.00     |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name           | Percent<br>  of   | Potential source of grav                                          | vel                 | Potential source of sand (Alaska criteria)                        |                     |  |
|------------------------------------|-------------------|-------------------------------------------------------------------|---------------------|-------------------------------------------------------------------|---------------------|--|
|                                    | map<br>  unit<br> | Rating class and limiting features                                | Value               | Rating class and limiting features                                | Value               |  |
| 623:<br>Mutnala                    | 45<br> <br>    45 | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                |  |
| Starichkof                         | 35<br> <br>       | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  |  |
| Slikok                             | 20                | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| 324:<br>Naptowne                   | <br>  80<br>      | <br> -<br> Improbable:<br>  Bottom layer not a source<br>         | <br> <br> 0.00      | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00      |  |
| 325:<br>Naptowne                   | <br>  80<br>      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| S26:<br>Naptowne                   | i<br>  80<br>     | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | i<br> <br> 0.00     |  |
| S27:<br>Naptowne                   | <br>  80<br>      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| S28:<br>Naptowne                   | <br>  80<br>      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| S29:<br>Naptowne                   | <br>  80<br>      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00      |  |
| 330:<br>Naptowne, moderately steep | 45<br>            | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| Naptowne, strongly sloping         | 40                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                | Improbable:<br>  Bottom layer not a source                        | 0.00                |  |
| 831:<br>Naptowne, strongly sloping | <br>  45<br>      | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                |  |
| Naptowne, gently sloping           | 40<br>            | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                |  |
| 332:<br>Niklason                   | <br> <br>  85<br> | <br> <br> Gravel source<br>                                       |                     | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 |  |
| 333:<br>Nikolaevsk                 | <br>   85<br>     | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> Probable:<br>  Bottom layer                                  | <br> <br> <br> 0.43 |  |
| 634:<br>Nikolaevsk                 | 83<br>            | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00 | <br> <br> Probable:<br>  Bottom layer                             | <br> <br> <br> 0.43 |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name                 | of                |                                                                    |                         | Potential source of (Alaska criteria                              |                         |
|------------------------------------------|-------------------|--------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------|-------------------------|
|                                          | map<br>  unit<br> | Rating class and limiting features                                 | Value                   | Rating class and limiting features                                | Value                   |
| 335:<br>Nikolaevsk                       | <br> <br> - 85    | <br> <br> Improbable:<br>  Bottom layer not a source               | <br> <br> <br> 0.00     | <br>                                                              | <br> <br> <br> 0.43     |
| 336:<br>Nikolai                          | <br>- 90<br>      | <br>  Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |
| 637:<br>Nikolai, somewhat poorly drained | <br>-   60<br>    | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source  | <br> <br> 0.00<br> 0.00 | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00      |
| Tuxedni                                  | -   25<br>        | <br> Improbable:<br>  Bottom layer not a source                    | <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 638:<br>Puntilla                         | <br>-   80<br>    | <br>                                                               | <br> <br> 0.00          | <br>                                                              | <br> <br> <br> 0.00     |
| 339:<br>Puntilla                         | <br>-   85<br>    | <br> Improbable:<br>  Bottom layer not a source                    | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 640:<br>Qutal                            | <br>-   77<br>    | <br> <br> Gravel source<br>                                        |                         | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                    |
| 641:<br>Qutal                            | <br> <br>- 80<br> | <br> <br> Gravel source<br>                                        |                         | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00     |
| 642:<br>Qutal                            | <br> -   80<br>   | <br> Gravel source<br>                                             |                         | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> <br> 0.00     |
| 643:<br>Redoubt, terraces                | <br>-   85<br>    | <br> -<br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00          | <br>   <br> Improbable:<br>  Bottom layer not a source            | <br> <br> 0.00          |
| 644:<br>Redoubt                          | <br>-   85<br>    | <br> Improbable:<br>  Bottom layer not a source                    | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 645:<br>Redoubt                          | <br>-   85<br>    | <br>  <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 646:<br>Redoubt, cool                    | <br>-   80<br>    | <br> -<br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00          | <br>                                                              | <br> <br> <br> 0.00     |
| 647:<br>Redoubt, moderately steep        | -   45<br>        | <br> <br> Improbable:<br>  Bottom layer not a source               | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| Redoubt, gently sloping                  | -   40            | <br> Improbable:<br>  Bottom layer not a source                    | 0.00                    | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name | Percent of map | Potential source of grav<br>(Alaska criteria)                         | Potential source of gravel (Alaska criteria) |                                                                   | sand<br>)               |
|--------------------------|----------------|-----------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------|-------------------------|
|                          | unit           | Rating class and limiting features                                    | Value                                        | Rating class and limiting features                                | Value<br> <br>          |
| 648:<br>Redoubt, cool    | 55             | <br> <br> Improbable:<br>  Bottom layer not a source                  | 0.00                                         | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00                    |
| Tuxedni                  | 35<br>         | <br> Improbable:<br>  Bottom layer not a source                       | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 649:<br>Riverwash        | 100            | l<br> <br> Not rated<br>                                              |                                              | <br> <br> Not rated                                               |                         |
| S50:<br>Salamatof        | 70<br>         | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source     | <br> <br> 0.00<br> 0.00                      | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |
| Doroshin                 | 22             | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source<br> | <br> 0.00<br> 0.00                           | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00      |
| 551:<br>Salamatof        | 80<br>         | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source     | <br> <br> 0.00<br> 0.00                      |                                                                   | <br> <br> 0.00<br> 0.00 |
| 852:<br>Slikok           | <br>           | <br> Improbable:<br>  Bottom layer not a source                       | <br> <br> 0.00                               | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00          |
| 853:<br>Slikok           | 82<br>         | <br>  <br> Improbable:<br>  Bottom layer not a source                 | <br> <br> 0.00                               | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 54:<br>Smithfha          | 85<br>         | <br> -<br> Improbable:<br>  Bottom layer not a source                 | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 55:<br>Smithfha          | 90             | <br> -<br> Improbable:<br>  Bottom layer not a source                 | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 556:<br>Smokey Bay       | 77             | <br> -<br> Improbable:<br>  Bottom layer not a source                 | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 557:<br>Smokey Bay       | 77             | <br>  <br> Improbable:<br>  Bottom layer not a source                 | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |
| 558:<br>Snowdance        | 90<br>         | <br> -<br> Improbable:<br>  Bottom layer not a source                 | 0.00                                         | <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00          |
| :59:<br>Soldotna         | 90<br>         | <br> <br> Improbable:<br>  Bottom layer not a source                  | 0.00                                         | <br> Probable:<br>  Bottom layer                                  | <br> <br> <br> 0.80     |
| 660:<br>Soldotna         | 90<br>         | <br> <br> Improbable:<br>  Bottom layer not a source                  | <br> <br> <br> 0.00                          | <br> <br> Probable:<br>  Bottom layer                             | <br> <br> <br> 0.80     |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name           | Percent<br>  of   | Potential source of gravel (Alaska criteria)          |                | Potential source of sand (Alaska criteria)      |                     |
|------------------------------------|-------------------|-------------------------------------------------------|----------------|-------------------------------------------------|---------------------|
|                                    | map<br>  unit<br> | Rating class and limiting features                    | Value          | Rating class and limiting features              | Value               |
| 661:<br>Soldotna                   | 85<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00 | <br>                                            | 0.80                |
| 662:<br>Soldotna                   | 85<br>            | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00           | <br> Probable:<br>  Bottom layer                | <br> <br> 0.80      |
| 663:<br>Soldotna, sandy substratum | 80<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00           | <br> Sand source                                |                     |
| 664:<br>Soldotna, sandy substratum | 80<br>            | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00           | <br> Sand source                                |                     |
| 665:<br>Soldotna, sandy substratum | 80<br>            | <br> -<br> Improbable:<br>  Bottom layer not a source | 0.00           | <br> Sand source                                |                     |
| 666:<br>Soldotna, sandy substratum | 80<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00           | <br> <br> Sand source<br>                       |                     |
| 667:<br>Soldotna, strongly sloping | 45<br> <br>       | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00 | <br> <br> Probable:<br>  Bottom layer           | <br> <br> <br> 0.80 |
| Soldotna, gently sloping           | 40                | <br> Improbable:<br>  Bottom layer not a source       | 0.00           | <br> Probable:<br>  Bottom layer                | <br> <br> 0.80      |
| 668:<br>Soldotna, sandy substratum | 80<br> <br>       | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00           | <br> <br> Sand source<br>                       |                     |
| Kenai                              | 40                | <br> Improbable:<br>  Bottom layer not a source       | 0.00           | <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 669:<br>Soldotna, sandy substratum | 80<br>            | <br> <br> Improbable:<br>  Bottom layer not a source  | 0.00           | <br> <br> Sand source<br>                       |                     |
| Kenai                              | 40                | <br> Improbable:<br>  Bottom layer not a source       | 0.00           | <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 670:<br>Soldotna                   | <br>    50<br>    | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00 | <br> Probable:<br>  Bottom layer                | <br> <br> 0.80      |
| Kichatna                           | 40                | <br> Gravel source<br>                                |                | <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |
| 671:<br>Soldotna                   | <br>    50<br>    | <br> <br> Improbable:<br>  Bottom layer not a source  | <br> <br> 0.00 | <br> Probable:<br>  Bottom layer                | 0.80                |
| Kichatna                           | 40<br>            | <br> Gravel source<br>                                |                | <br> Improbable:<br>  Bottom layer not a source | <br> <br> 0.00      |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name     | Percent of             | Potential source of grav                                               | vel                          | Potential source of sand (Alaska criteria)                             |                         |  |
|------------------------------|------------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------|-------------------------|--|
|                              | map<br>  unit<br> <br> | Rating class and limiting features                                     | Value                        | Rating class and limiting features                                     | Value                   |  |
| 672:                         | i                      | <br>                                                                   | _ i<br>                      | <br> <br>                                                              |                         |  |
| Soldotna                     | 55<br>                 | Improbable:<br>  Bottom layer not a source                             | <br> 0.00                    | Probable:<br>  Bottom layer                                            | <br> 0.80               |  |
| Nikolai                      | 45<br> <br>            | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00           | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00      |  |
| 673:<br>Spenard              | 89<br>                 | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                    |  |
| 674:<br>Spenard              | 67<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |  |
| 675:<br>Spenard              | 87<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> 0.00               | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                    |  |
| 676:<br>Starichkof           | 60<br>                 | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |  |
| Doroshin                     | 35<br> <br>            | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00      |  |
| 677:<br>Starichkof           | 75<br> <br>            | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |  |
| 678:<br>Starichkof           | 82<br> <br>            | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00      | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |  |
| 679:<br>Starichkof, forested | 85<br> <br>            | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00      | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |  |
| 680:<br>Starichkof           | 45<br> <br>            | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> 0.00<br> 0.00 |  |
| Slikok                       | 30<br>                 | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00          |  |
| Naptowne                     | 25<br>                 | Improbable:<br>  Bottom layer not a source                             | 0.00                         |                                                                        | 0.00                    |  |

Table 21. Construction Materials: Gravel and Sand—Continued

|                              | Percent of             | nt Potential source of gravel (Alaska criteria)                        |                              | Potential source of (Alaska criteria                                   |                              |
|------------------------------|------------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------|------------------------------|
|                              | map<br>  unit<br> <br> | Rating class and I limiting features                                   | Value<br> <br>               | Rating class and Imiting features                                      | Value                        |
| 681:<br>Starichkof           | 50                     | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 | <br> <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 |
| Spenard                      | 42<br>                 | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |
| 882:<br>Susitna              | <br>   85<br>          | <br> <br> Gravel source<br>                                            |                              | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         |
| Riverwash                    | 5<br>                  | <br> Not rated<br>                                                     |                              | <br> Not rated<br>                                                     |                              |
| 683:<br>Susitna              | <br>  85<br>           | <br> Gravel source<br>                                                 |                              | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |
| 84:<br>Talkeetna             | <br>  94<br>           | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | <br> <br> 0.00               |
| 885:<br>Talkeetna            | 90<br>                 | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         |
| 886:<br>Talkeetna            | <br>   55<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         |
| Starichkof                   | 40<br> <br>            | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> 0.00<br> 0.00           | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      |
| 887:<br>Tangerra             | 80<br>                 | <br> <br> Gravel source<br>                                            |                              | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          |
| 688:<br>Beaches, tidal flats | 90                     | <br> <br> Not rated<br>                                                |                              | <br> <br> Not rated<br>                                                |                              |
| 889:<br>Tlikakila            | 90                     | <br> Improbable:<br>  Bottom layer not a source                        | 0.00                         | <br> Sand source<br>                                                   |                              |
| 890:<br>Tlikakila            | <br>  87<br>           | <br> <br> Improbable:<br>  Bottom layer not a source                   | 0.00                         | <br> <br> Sand source<br>                                              |                              |
| 991:<br>Tlikakila            | 85<br> <br>            | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          | <br> <br> Sand source<br>                                              |                              |
| 692:<br>Tokositna            | <br> <br>  85<br>      | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                   | <br> <br> <br> 0.00          |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name   | of                     |                                                                                      |                              | Potential source of sand (Alaska criteria)                                           |                         |  |
|----------------------------|------------------------|--------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------|-------------------------|--|
|                            | map<br>  unit<br> <br> | Rating class and limiting features                                                   | Value<br> <br>               | Rating class and limiting features                                                   | Value                   |  |
| 593:<br>Tokositna          | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00     |  |
| 894:<br>Tokositna          | 90<br>                 | <br> <br> Improbable:<br>  Bottom layer not a source                                 | 0.00                         | <br> Improbable:<br>  Bottom layer not a source                                      | 0.00                    |  |
| 95:<br>Truuli              | <br>   88<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | 0.00                    |  |
| 996:<br>Tutka              | <br>  45<br> <br>      | <br> <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source | <br> <br> <br> 0.00<br> 0.00 | <br> <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet | <br> <br> 0.00<br> 0.00 |  |
| Kasitsna                   | 40<br>                 | <br> Improbable:<br>  Bottom layer not a source                                      | <br> <br> 0.00               | <br> Improbable:<br>  Bottom layer not a source                                      | <br> <br> 0.00          |  |
| Rock outcrop               | 15                     | <br> Not rated                                                                       |                              | <br> Not rated                                                                       |                         |  |
| 997:<br>Tutka              | <br>  55<br>           | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source      | <br> <br> 0.00<br> 0.00      | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet      | <br> <br> 0.00<br> 0.00 |  |
| Portgraham                 | 30<br> <br>            | <br> Improbable:<br>  Hard bedrock within 4 feet<br>  Bottom layer not a source      | <br> 0.00<br> 0.00           | <br> Improbable:<br>  Bottom layer not a source<br>  Hard bedrock within 4 feet      | <br> 0.00<br> 0.00      |  |
| 98:<br>Tuxedni             | <br> <br>  85<br>      | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00     |  |
| :99:<br>Tuxedni            | <br>   85<br>          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | <br> <br> <br> 0.00          | <br> <br> Improbable:<br>  Bottom layer not a source                                 | 0.00                    |  |
| 700:<br>Tuxedni, warm      | 85<br>                 | <br>                                                                                 | <br> <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer not a source                                      | 0.00                    |  |
| '01:<br>Typic Cryaquents   | <br>  95<br>           | <br>                                                                                 | 0.00                         | <br> Probable:<br>  Bottom layer                                                     | 0.77                    |  |
| 02:<br>Typic Cryopsamments | 84<br> <br>            | <br>                                                                                 | <br> <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer                                                   | <br> <br> <br> 0.77     |  |
| '03:<br>Typic Cryorthents  | 80<br>                 | <br>                                                                                 | <br> <br> <br> 0.00          | <br> Improbable:<br>  Bottom layer                                                   | <br> <br> <br> 0.77     |  |
| 704:<br>Urban land         | <br> <br> 85           | <br> <br> Not rated                                                                  |                              | <br> <br> Not rated                                                                  |                         |  |

Table 21. Construction Materials: Gravel and Sand—Continued

| Map symbol and soil name | Percent<br>  of<br>  map | of (Alaska criteria)                                              |                    | Potential source of sand (Alaska criteria)                        |                     |
|--------------------------|--------------------------|-------------------------------------------------------------------|--------------------|-------------------------------------------------------------------|---------------------|
|                          | unit<br>  unit<br>       | Rating class and limiting features                                | Value<br> <br>_ _  | Rating class and limiting features                                | Value               |
| 705:<br>Water, fresh     | <br> <br> 100            | <br> <br> Not rated                                               |                    | <br> <br> Not rated                                               |                     |
| 706:<br>Whitsol          | 90<br>                   | <br> <br> Improbable:<br>  Bottom layer not a source              | 0.00               | <br> Probable:<br>  Bottom layer                                  | <br> <br> 0.80      |
| 707:<br>Whitsol          | 90<br>                   | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00     | <br> Probable:<br>  Bottom layer                                  | <br> <br> <br> 0.80 |
| 708:<br>Whitsol          | 85<br>                   | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00     | <br> Probable:<br>  Bottom layer                                  | <br> <br> 0.80      |
| 709:<br>Whitsol          | 85<br>                   | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00     | <br> Probable:<br>  Bottom layer                                  | <br> <br> 0.80      |
| 710:<br>Whitsol          | 85<br>                   | <br> <br> Improbable:<br>  Bottom layer not a source              | <br> <br> 0.00     | <br> Probable:<br>  Bottom layer                                  | <br> <br> <br> 0.80 |
| 711:<br>Whitsol          | 55                       | <br>                                                              | 0.00               | <br> Probable:<br>  Bottom layer                                  | <br> <br> 0.80      |
| Doroshin                 | 30<br> <br>              | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00 | <br> Improbable:<br>  Organic soil<br>  Bottom layer not a source | <br> 0.00<br> 0.00  |

Table 22. Construction Materials: Topsoil and Roadfill

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

| Map symbol and soil name         |                          | Potential source of topsoi (Alaska criteria)                                        | I                                    | Potential source of roadfill<br>  (Alaska criteria)                                                                     |                                           |  |
|----------------------------------|--------------------------|-------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|
|                                  | map<br> unit<br> <br>_ l | Rating class and limiting features                                                  | Value                                | Rating class and limiting features                                                                                      | Value                                     |  |
| 501: Aquic Cryofluvents          | <br>  85<br> <br>        | <br>                                                                                | <br> <br> 0.78<br> <br>              | <br> Poor:<br>  High frost action (check lower<br>  layers)<br>  Depth to saturated zone<br>  Low strength              | <br> <br> 0.00<br> <br> 0.78<br> 0.78     |  |
| 502: Aquic Cryofluvents, shallow | 80<br> <br>              | <br> Poor:<br>  Too sandy<br>  Rock fragment_content<br>  Depth to saturated zone   | <br> <br> 0.00<br> 0.41<br> 0.78     | <br> Poor:<br>  High frost action<br>  (check lower layers)<br>  Depth to saturated zone                                | <br> <br> 0.00<br> <br> 0.78              |  |
| 503:<br>Badland, sea cliffs      | 100                      | <br> <br> Not rated<br>                                                             |                                      | <br> -<br> Not rated<br>                                                                                                |                                           |  |
| 504:<br>Badland, sea cliffs      | 55                       | <br> Not rated                                                                      | į                                    | <br> Not rated                                                                                                          | ļ                                         |  |
| Typic Cryorthents                | 45<br> <br> <br> <br>    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.00<br> 0.32<br> 0.88 | <br> Poor:<br>  Slope<br>  Moderate frost action (check<br>  lower layers)<br>                                          | <br> 0.00<br> 0.50                        |  |
| 505:<br>Beaches                  | <br> <br> 90             | <br> <br> Not rated                                                                 |                                      | <br> <br> Not rated                                                                                                     |                                           |  |
| 506:<br>Beluga                   | <br>  85<br> <br>        | <br> Poor:<br>  Depth to saturated zone<br> <br> <br>                               | <br> <br> 0.00<br> <br>              | <br> Poor:<br>  Depth to saturated zone<br>  Low strength<br>  High frost action (check lower layers)<br>  Shrink-swell | <br> 0.00<br> 0.00<br> 0.00<br> 0.99      |  |
| 507:<br>Beluga                   | <br>  87<br> <br>        | <br> <br> Fair:<br>  Depth to saturated zone<br> <br> <br>                          | <br> <br> 0.04<br> <br>              | Poor:<br>  Low strength<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Shrink-swell      | <br> 0.00<br> 0.00<br> 0.04<br> 0.99      |  |
| 508:<br>Beluga                   | <br>  87<br> <br>        | <br> Fair:<br>  Depth to saturated zone<br>  Slope<br>                              | <br> <br> 0.04<br> 0.84<br>          | <br> Poor:<br>  Low strength<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Shrink-swell | <br> <br> 0.00<br> 0.00<br> 0.04<br> 0.99 |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of<br> map | <br>  Potential source of topso<br>  (Alaska criteria)                        | oil                         | Potential source of roadfill<br>(Alaska criteria)                                                                       |                                           |
|--------------------------|---------------------------|-------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | unit<br> unit<br>         | Rating class and limiting features                                            | Value                       | Rating class and   limiting features                                                                                    | Value                                     |
| 509:<br>Beluga           | <br>   55<br> <br> <br>   | <br> -<br> Fair:<br>  Depth to saturated zone<br> <br> <br>                   | 0.04                        | <br> Poor:<br>  Low strength<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Shrink-swell | <br> <br> 0.00<br> 0.00<br> 0.04<br> 0.99 |
| Mutnala                  | 40<br> <br>               | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid      | <br> 0.00<br> 0.95<br> 0.99 | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                                                         | <br> 0.00<br>                             |
| 510:<br>Beluga           | 60<br> <br> <br>          | <br> Fair:<br>  Depth to saturated zone<br> <br> <br>                         | <br> 0.04<br> <br>          | <br> Poor:<br>  Low strength<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Shrink-swell | <br> <br> 0.00<br> 0.00<br> 0.04<br> 0.99 |
| Smokey Bay               | 37                        | <br> Fair:<br>  Depth to saturated zone<br>  Rock fragment content            | <br> 0.04<br> 0.50          | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone                                     | <br> 0.00<br> 0.04                        |
| 511:<br>Beluga           | <br>  50<br> <br>         | <br> Fair:<br>  Depth to saturated zone<br>  Slope<br>                        | <br> 0.04<br> 0.84<br>      | <br> Poor:<br>  Low strength<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Shrink-swell | <br> 0.00<br> 0.00<br> 0.04<br> 0.99      |
| Smokey Bay               | 47<br> <br>               | <br> Fair:<br>  Depth to saturated zone<br>  Slope<br>  Rock fragment content | <br> 0.04<br> 0.37<br> 0.50 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>                                 | <br> 0.00<br> 0.04<br>                    |
| 512:<br>Benka            | 86                        | <br> <br> Good source<br>                                                     |                             | <br> Poor:<br>  High frost action (check lower layers)                                                                  | 0.00                                      |
| 513:<br>Benka            | 90                        | <br> <br> Good source<br>                                                     |                             | <br> Poor:<br>  High frost action (check lower layers)                                                                  | 0.00                                      |
| 514:<br>Benka            | 85<br>                    | <br> Fair:<br>  Slope                                                         | 0.63                        | <br> Poor:<br>  High frost action (check lower layers)                                                                  | 0.00                                      |
| 515:<br>Benka            | 90<br> <br>               | <br> <br> Poor:<br>  Slope<br>                                                | <br> <br> 0.00              | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope                                                       | <br> <br> 0.00<br> 0.50                   |
| 516:<br>Benka            | 95                        | <br> <br> Poor:<br>  Slope<br>                                                | <br> <br> 0.00              | <br> <br> Poor:<br>  Slope<br>  High frost action (check lower layers)                                                  | <br> <br> 0.00<br> 0.00                   |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name           |                                   | Potential source of tops (Alaska criteria)                                                  | soil                                 | Potential source of roadfill (Alaska criteria)                                        |                                  |
|------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------|----------------------------------|
|                                    | map<br> unit<br> <br>             | :                                                                                           | Value                                | Rating class and limiting features                                                    | Value                            |
| 517:<br>Benka, strongly sloping    | <br> <br>    45<br>               | <br> <br> Fair:<br>  Slope                                                                  | 0.37                                 | <br> <br> Poor:<br>  High frost action (check lower layers)                           | <br> <br> <br> 0.00              |
| Benka, gently sloping              | 40                                | <br> Good source<br>                                                                        |                                      | <br> Poor:<br>  High frost action (check lower layers)                                | 0.00                             |
| 518:<br>Boxcar                     | 75<br> <br>                       | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim                                  | <br> <br> <br> 0.00<br> 0.00         | <br> Poor:<br>  High frost action (check lower layers)<br>  Cobble content            | <br> <br> <br> 0.00<br> 0.91     |
| 519:<br>Boxcar                     | <br>  80<br> <br>                 | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Hard to reclaim                       | <br> 0.00<br> 0.00<br> 0.00          | <br> Poor:<br>  High frost action (check lower layers)<br>  Cobble content            | <br> <br> 0.00<br> 0.91          |
| 520:<br>Boxcar                     | <br>   85<br> <br>                | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim                       | <br> 0.00<br> 0.00<br> 0.00          | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Cobble content | <br> <br> 0.00<br> 0.00<br> 0.91 |
| 521:<br>Boxcar, cool               | 80<br> <br>                       | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim                                  | <br> <br> 0.00<br> 0.00              | <br> Poor:<br>  High frost action (check lower layers)<br>  Cobble content            | <br> <br> 0.00<br> 0.91          |
| 522:<br>Boxcar, cool               | <br>  80<br> <br>                 | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim                       | <br> 0.00<br> 0.00<br> 0.00          | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Cobble content | <br> 0.00<br> 0.00<br> 0.91      |
| 523:<br>Chenega                    | <br>   85<br> <br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Too acid<br>  Not hard to reclaim | <br> 0.00<br> 0.00<br> 0.88<br> 0.99 | <br> Good source<br> <br> <br> <br>                                                   |                                  |
| 524:<br>Chenega, cool              | 90<br> <br> <br> <br>             | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Too acid<br>  Not hard to reclaim | <br> 0.00<br> 0.00<br> 0.88<br> 0.99 | <br> Good source<br> <br> <br> <br>                                                   |                                  |
| 525: Chenega, occasionally flooded | <br>   85<br> <br> <br> <br> <br> | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Too acid<br>  Not hard to reclaim | <br> 0.00<br> 0.00<br> 0.88<br> 0.99 | <br> Good source<br> <br> <br> <br>                                                   | <br> <br> <br> <br> <br>         |
| 526:<br>Chulitna                   | <br>  90<br> <br>                 | <br> Fair:<br>  Too acid<br>                                                                | <br> <br> 0.98<br>                   | <br> Poor:<br>  High frost action (check lower layers)<br>                            | <br> <br> 0.00                   |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | of                    | Pct,   Potential source of topsoil                                                                    |                                      | Potential source of roadfill<br>(Alaska criteria)                                                |                                      |
|--------------------------|-----------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------|
|                          |                       | Rating class and limiting features                                                                    | Value                                | Rating class and limiting features                                                               | Value                                |
| 527:<br>Chulitna         | 80<br>                | <br> <br> Fair:<br>  Too acid                                                                         | <br> <br> <br> 0.98                  | <br> Poor:<br>  High frost action (check lower layers)                                           | <br> <br> <br> 0.00                  |
| 528:<br>Chulitna         | 85<br> <br>           | <br> Fair:<br>  Slope<br>  Too acid                                                                   | <br> <br> 0.37<br> 0.98              | <br> Poor:<br>  High frost action (check lower layers)<br>                                       | <br> <br> 0.00                       |
| 529:<br>Chulitna         | 85<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid                                                                   | <br> <br> 0.00<br> 0.98              | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope                                | <br> <br> 0.00<br> 0.50              |
| 530:<br>Chunilna         | 92<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid                      | <br> <br> 0.00<br> 0.00<br> 0.99     | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)              | <br> <br> 0.00<br> 0.00              |
| 531:<br>Chunilna         | 82<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid                      | <br> 0.00<br> 0.00<br> 0.99          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)              | <br> <br> 0.00<br> 0.00              |
| 532:<br>Chunilna, cool   | 80                    | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid                      | <br> 0.00<br> 0.00<br> 0.99          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)              | <br> <br> 0.00<br> 0.00              |
| 533:<br>Chunilna, cool   | 85<br> <br> <br> <br> | Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Slope<br>  Too acid                | <br> 0.00<br> 0.12<br> 0.84<br> 0.99 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone              | <br> 0.00<br> 0.12<br>               |
| 534:<br>Clam Gulch       | 85<br> <br> <br> <br> | <br> Poor:<br>  Depth to dense layer<br>  Depth to saturated zone                                     | <br> 0.00<br> 0.00<br>               |                                                                                                  | <br> 0.00<br> 0.00<br> 0.00<br> 0.92 |
| 535:<br>Clunie           | <br>  90<br> <br>     | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid                  | <br> 0.00<br> 0.00<br> 0.68          | Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength | <br> 0.00<br> 0.00<br> 0.22          |
| 536:<br>Coal Creek       | 75<br>   175<br>      | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.04<br> 0.68<br> 0.88 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>          | <br> 0.00<br> 0.04<br>               |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of          | Potential source of topso<br>(Alaska criteria)                                                        | oil                                           | Potential source of roadfill<br>(Alaska criteria)                                            |                                  |
|--------------------------|----------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------|
|                          | map<br> unit<br> <br>      | Rating class and limiting features                                                                    | Value                                         | Rating class and limiting features                                                           | Value                            |
| 537:<br>Coal Creek       | <br>   88<br> <br> <br>    | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.04<br> 0.68<br> 0.88          | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone          | <br> <br> 0.00<br> 0.04<br>      |
| 538:<br>Coal Creek       | 88<br> <br> <br> <br> <br> |                                                                                                       | <br> 0.00<br> 0.04<br> 0.63<br> 0.68<br> 0.88 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br> <br> | <br> 0.00<br> 0.04<br>           |
| 539:<br>Cohoe            | 87<br> <br>                | <br> Fair:<br>  Too acid<br>                                                                          | <br> <br> 0.92<br>                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78          |
| 540:<br>Cohoe            | 85<br> <br>                | <br> Fair:<br>  Too acid<br>                                                                          | <br> <br> 0.92<br>                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78          |
| 541:<br>Cohoe            | 89<br> <br>                | <br> Fair:<br>  Slope<br>  Too acid                                                                   | <br> 0.63<br> 0.92                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78          |
| 542:<br>Cohoe            | <br>   93<br> <br>         | <br> Poor:<br>  Slope<br>  Too acid<br>                                                               | <br> 0.00<br> 0.92                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope<br>  Low strength          | <br> 0.00<br> 0.50<br> 0.78      |
| 543:<br>Cohoe            | 80<br> <br>                | <br> Poor:<br>  Slope<br>  Too acid<br>                                                               | <br> <br> 0.00<br> 0.92                       | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Low strength          | <br> <br> 0.00<br> 0.00<br> 0.78 |
| 544:<br>Cohoe            | <br>   84<br> <br>         | <br> Poor:<br>  Slope<br>  Too acid<br>                                                               | <br> <br> 0.00<br> 0.92                       | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Low strength          | <br> <br> 0.00<br> 0.00<br> 0.78 |
| 545:<br>Cohoe, dry       | 87                         | <br> Fair:<br>  Too acid<br>                                                                          | <br> <br> 0.92<br>                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78          |
| 546:<br>Cohoe, dry       | 85<br> <br>                | <br> Fair:<br>  Too acid<br>                                                                          | <br> <br> 0.92<br>                            | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78          |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name             | <br> Pct,<br>  of     | (Alaska criteria)                             | osoil                   | Potential source of roadfill (Alaska criteria)                                                      |                                  |  |
|--------------------------------------|-----------------------|-----------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------|--|
|                                      | map<br> unit<br> <br> |                                               | Value                   | Rating class and limiting features                                                                  | Value                            |  |
| 547:<br>Cohoe, dry                   | 89<br> <br>           | <br> -<br> Fair:<br>  Slope<br>  Too acid     |                         | <br>                                                                                                | <br> <br> <br> 0.00<br> 0.78     |  |
| 548:<br>Cohoe, dry                   | <br>  93<br> <br>     | <br> Poor:<br>  Slope<br>  Too acid<br>       | <br> 0.00<br> 0.92      | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope<br>  Low strength                 | <br> 0.00<br> 0.50<br> 0.78      |  |
| 549:<br>Cohoe, dry                   | 80                    | <br> Poor:<br>  Slope<br>  Too acid<br>       | <br> 0.00<br> 0.92<br>  | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Low strength                 | <br> <br> 0.00<br> 0.00<br> 0.78 |  |
| 550:<br>Cohoe, dry                   | 84<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Too acid<br>       | <br> 0.00<br> 0.92      | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>  Low strength                 | <br> 0.00<br> 0.00<br> 0.78      |  |
| 551: Cohoe, moderately steep         | 45<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid<br>       |                         | <br> Poor:<br> High frost action (check lower layers)<br>  Low strength<br>  Slope                  | <br> <br> 0.00<br> 0.78<br> 0.98 |  |
| Cohoe, gently sloping                | 40<br> <br>           | <br> Fair:<br>  Too acid<br>                  | <br> <br> 0.92<br>      | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                            | <br> 0.00<br> 0.78               |  |
| 552:<br>Cohoe, dry, moderately steep | 45<br> <br> <br>      | <br> -<br> Poor:<br>  Slope<br>  Too acid<br> | <br> 0.00<br> 0.92<br>  | <br>                                                                                                | <br> <br> 0.00<br> 0.78<br> 0.98 |  |
| Cohoe, dry, gently sloping           | 40<br> <br>           | <br> Fair:<br>  Too acid<br>                  | <br> <br> 0.92<br>      | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                            | <br> <br> 0.00<br> 0.78          |  |
| 553:<br>Cohoe, dry                   | <br>  55<br>          | <br> <br> Fair:<br>  Slope<br>  Too acid      | <br> 0.63<br> 0.92      | <br>  Poor:<br>  High frost action (check lower layers)<br>  Low strength                           | <br> <br> 0.00<br> 0.78          |  |
| Kenai                                | 30<br> <br> <br> <br> | <br> Fair:<br>  Slope<br> <br> <br> <br>      | <br> 0.63<br> <br> <br> | <br> Poor:<br>  Low strength<br>  Moderate frost action (check lower<br>  layers)<br>  Shrink-swell | <br> 0.00<br> 0.50<br> <br> 0.98 |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name |                       | Pct,   Potential source of topsoil    <br>  of   (Alaska criteria)    <br> map       |                                  | Potential source of roadfill<br>  (Alaska criteria)<br>                                                        |                                           |
|--------------------------|-----------------------|--------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                          | unit                  | Rating class and limiting features                                                   | Value<br> <br>                   | Rating class and limiting features                                                                             | Value                                     |
| 554:<br>Cohoe, dry       | <br> <br> 55<br> <br> | <br> <br> Poor:<br>  Slope<br>  Too acid<br>                                         | <br> <br> 0.00<br> 0.92          | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope<br>  Low strength                            | <br> <br> 0.00<br> 0.50<br> 0.78          |
| Kenai                    | 30<br> <br> <br> <br> | <br> Poor:<br>  Slope<br> <br> <br>                                                  | <br> 0.00<br> <br> <br>          | <br> Poor:<br>  Low strength<br>  Moderate frost action (check lower<br>  layers)<br>  Slope<br>  Shrink-swell | <br> 0.00<br> 0.50<br> <br> 0.50<br> 0.98 |
| 555:<br>Cohoe, dry       | 70<br>                | <br> Poor:<br>  Slope<br>  Too acid                                                  | <br> <br> 0.00<br> 0.92          | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                                       | <br> <br> 0.00<br> 0.78                   |
| Nikolai                  | 30                    | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid      | <br> 0.00<br> 0.00<br> 0.32      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                        | <br> 0.00<br> 0.00                        |
| 556:<br>Cohoe, dry       | 70<br> <br>           | <br> <br> Fair:<br>  Too acid<br>                                                    | <br> <br> <br> 0.92              | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                                       | <br> <br> 0.00<br> 0.78                   |
| Nikolai                  | 30                    | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> 0.00<br> 0.00<br> 0.32      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                        | <br> 0.00<br> 0.00                        |
| 557:<br>Cytex Creek      | 75<br> <br> <br> <br> | <br> Fair:<br>  Depth to saturated zone<br>  Hard to reclaim<br>  Too acid           | <br> <br> 0.06<br> 0.32<br> 0.98 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone                            | <br> <br> 0.00<br> 0.06                   |
| 558:<br>Doroshin         | 83<br> <br> <br>      |                                                                                      | <br> 0.00<br> 0.00<br> 0.50      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                            | <br> <br> 0.00<br> 0.00                   |
| 559:<br>Doroshin         | 79<br> <br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> 0.00<br> 0.00<br> 0.50      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                        | <br> 0.00<br> 0.00                        |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | Pct,<br>  of          | (Alaska criteria)                                                                    | il                                   | Potential source of roadfill (Alaska criteria)                                          |                         |  |
|--------------------------|-----------------------|--------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------|-------------------------|--|
|                          | map<br> unit<br> <br> |                                                                                      | Value                                | Rating class and limiting features                                                      | Value                   |  |
| 560:<br>Dystrocryepts    | 50<br> <br>           | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Too acid                       | <br> <br> 0.00<br> 0.00<br> 0.88     | <br> <br> Good source<br> <br> <br>                                                     |                         |  |
| Typic Cryorthents        | 30                    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid  | <br> 0.00<br> 0.00<br> 0.32<br> 0.88 | <br> Fair:<br>  Moderate frost action (check lower<br>  layers)<br>  Slope<br>          | <br> 0.50<br> <br> 0.50 |  |
| Iliamna, cool            | 20<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid                                                  | <br> <br> 0.00<br> 0.98              | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                         | <br> 0.00<br>           |  |
| 561:<br>Foreland         | 79<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content                   | <br> <br> 0.00<br> 0.50              | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)     | <br> <br> 0.00<br> 0.00 |  |
| 562:<br>Foreland         | <br>  59<br>          | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content                   | <br> <br> 0.00<br> 0.50              | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)     | <br> 0.00<br> 0.00      |  |
| Soldotna                 | 20                    | <br> Fair:<br>  Hard to reclaim<br>  Too acid                                        | <br> <br> 0.98<br> 0.98              | <br> Poor:<br>  High frost action (check lower layers)<br>                              | <br> 0.00<br>           |  |
| Starichkof               | 20                    | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br> | <br> 0.00<br> 0.00      |  |
| 563:<br>Pits, gravel     | 95                    | <br> <br> Not rated                                                                  |                                      | <br>                                                                                    |                         |  |
| 564:<br>Iliamna          | 80                    | <br> Fair:<br>  Too acid                                                             | <br> <br> 0.98                       | <br> Poor:<br>  High frost action (check lower layers)                                  | 0.00                    |  |
| 565:<br>Iliamna          | 82<br> <br>           | <br> Fair:<br>  Slope<br>  Too acid                                                  | <br> <br> 0.84<br> 0.98              | <br> Poor:<br>  High frost action (check lower layers)<br>                              | <br> <br> 0.00          |  |
| 566:<br>Iliamna          | 80<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid                                                  | <br> 0.00<br> 0.98                   | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope                       | <br> <br> 0.00<br> 0.00 |  |
| 567:<br>Iliamna, cool    | 90<br>                | <br> Fair:<br>  Too acid                                                             | <br> <br> 0.98                       | <br> Poor:<br>  High frost action (check lower layers)                                  | 0.00                    |  |
| 568:<br>Island           | 90<br>                | <br> Fair:<br>  Too acid<br>                                                         | <br> <br> <br> 0.95                  | <br> -<br> Poor:<br>  High frost action (check lower layers)<br>                        | <br> <br> <br> 0.00     |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name |               | Potential source of topsoil              |                         | Potential source of roadfill<br>(Alaska criteria)                  |                              |  |
|--------------------------|---------------|------------------------------------------|-------------------------|--------------------------------------------------------------------|------------------------------|--|
|                          | unit          |                                          | Value<br> <br>          | Rating class and limiting features                                 | Value                        |  |
| 569:<br>Island           | 91<br>        | <br> <br> Fair:<br>  Too acid            | 0.95                    | <br> <br> Poor:<br>  High frost action (check lower layers)        | <br> <br> <br> 0.00          |  |
| 570:<br>Island           | 90<br> <br>   | <br> <br> Fair:<br>  Slope<br>  Too acid | <br> <br> 0.37<br> 0.95 | <br> Poor:<br>  High frost action (check lower layers)<br>         | <br> <br> 0.00               |  |
| 571:<br>Island           | <br>   92<br> | <br> <br> Poor:<br>  Slope<br>  Too acid | <br> <br> 0.00<br> 0.95 | <br>  Poor:<br>  High frost action (check lower layers)<br>  Slope | <br> <br> <br> 0.00<br> 0.00 |  |
| 572: Island, forested    | 90            | <br> -<br> Fair:<br>  Too acid<br>       | <br> <br> <br> 0.95     | <br> -<br> Poor:<br>  High frost action (check lower layers)<br>   | <br> <br> <br> 0.00          |  |
| 573:<br>Kachemak         | 80<br> <br>   | <br> Fair:<br>  Too acid<br>             | <br> <br> 0.88          | <br> Poor:<br>  High frost action (check lower layers)<br>         | <br> <br> 0.00               |  |
| 574:<br>Kachemak         | 80<br> <br>   | <br> Fair:<br>  Slope<br>  Too acid      | <br> 0.63<br> 0.88      | <br> Poor:<br>  High frost action (check lower layers)<br>         | <br> <br> 0.00<br>           |  |
| 575:<br>Kachemak         | 80<br>        | <br> Poor:<br>  Slope<br>  Too acid      | <br> 0.00<br> 0.88      | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope  | <br> <br> 0.00<br> 0.50      |  |
| 576:<br>Kachemak         | <br>   80<br> | <br> <br> Poor:<br>  Slope<br>  Too acid | <br> <br> 0.00<br> 0.88 | <br>  Poor:<br>  Slope<br>  High frost action (check lower layers) | <br> <br> 0.00<br> 0.00      |  |
| 577:<br>Kachemak         | 90<br> <br>   | <br> Poor:<br>  Slope<br>  Too acid      | <br> 0.00<br> 0.88      | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)  | <br> <br> 0.00<br> 0.00      |  |
| 578:<br>Kachemak, cool   | 80            | <br> -<br> Fair:<br>  Too acid           | <br> <br> <br> 0.88     | <br> -<br> Poor:<br>  High frost action (check lower layers)       | <br> <br> 0.00               |  |
| 579:<br>Kachemak, cool   | 80            | <br> Fair:<br>  Slope<br>  Too acid      | <br> 0.63<br> 0.88      | <br> Poor:<br>  High frost action (check lower layers)             | <br> <br> 0.00               |  |
| 580:<br>Kachemak, cool   | 80            | <br> Poor:<br>  Slope<br>  Too acid      | <br> <br> 0.00<br> 0.88 | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope  | <br> <br> 0.00<br> 0.50      |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name   |                       | Pct,   Potential source of topsoil   of   (Alaska criteria)   map                               |                                      | Potential source of roadfill (Alaska criteria)                                                     |                              |  |
|----------------------------|-----------------------|-------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------|--|
|                            | map<br> unit<br> <br> | Rating class and limiting features                                                              | Value                                | Rating class and limiting features                                                                 | Value                        |  |
| 581:<br>Kachemak, cool     | 80<br> <br>           | <br> <br> Poor:<br>  Slope<br>  Too acid                                                        | <br> 0.00<br> 0.88                   | <br>  Poor:<br>  Slope<br>  High frost action (check lower layers)                                 | <br> <br> <br> 0.00<br> 0.00 |  |
| 582:<br>Kachemak, cool     | 80<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid                                                             | <br> <br> 0.00<br> 0.88              | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)                                  | <br> <br> 0.00<br> 0.00      |  |
| 583:<br>Kachemak, forested | 75<br> <br>           | <br> <br> Fair:<br>  Too acid<br>                                                               | <br> <br> <br> 0.88                  | <br> Poor:<br>  High frost action (check lower layers)<br>                                         | <br> <br> <br> 0.00          |  |
| 584: Kachemak, forested    | 85<br> <br>           | <br> Fair:<br>  Slope<br>  Too acid                                                             | <br> 0.63<br> 0.88                   | <br> Poor:<br>  High frost action (check lower layers)<br>                                         | <br> <br> 0.00<br>           |  |
| 585:<br>Kachemak, forested | <br>  80<br> <br>     | <br> Poor:<br>  Slope<br>  Too acid                                                             | <br> 0.00<br> 0.88                   | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope                                  | <br> <br> 0.00<br> 0.50      |  |
| 586:<br>Kachemak, cool     | 60<br>                | <br> Fair:<br>  Too acid<br>                                                                    | <br> <br> <br> 0.88                  | <br> -<br> Poor:<br>  High frost action (check lower layers)                                       | <br> <br> 0.00               |  |
| Snowdance                  | 40<br> <br>           | Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Hard to reclaim              | <br> 0.00<br> 0.04<br> 0.92          | Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Cobble content | <br> 0.00<br> 0.04<br> 0.77  |  |
| 587:<br>Kachemak, cool     | 65<br>                | <br> Fair:<br>  Too acid                                                                        | <br> <br> <br> 0.88                  | <br> -<br> Poor:<br>  High frost action (check lower layers)                                       | <br> <br> 0.00               |  |
| Snowdance                  | 35<br> <br> <br> <br> | Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Hard to reclaim              |                                      | Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Cobble content | <br> 0.00<br> 0.04<br> 0.77  |  |
| 588:<br>Kachemak, cool     | 70<br> <br>           | <br> Fair:<br>  Slope<br>  Too acid                                                             | <br> <br> 0.63<br> 0.88              | <br> Poor:<br>  High frost action (check lower layers)<br>                                         | <br> <br> 0.00               |  |
| Snowdance                  | 30                    | Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Slope<br>  Hard to reclaim   | <br> 0.00<br> 0.04<br> 0.63<br> 0.92 | Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Cobble content | <br> 0.00<br> 0.04<br> 0.77  |  |
| 589:<br>Kalifonsky         | 83                    | <br> Poor:<br>  Depth to saturated zone<br>  Too sandy<br>  Rock fragment content<br>  Too acid | <br> 0.00<br> 0.00<br> 0.00<br> 0.95 | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>            | <br> 0.00<br> 0.00           |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name            |                             | Pct,   Potential source of topsoil  <br>  of   (Alaska criteria)                                |                                           | Potential source of roadfill (Alaska criteria)                                                        |                                  |  |
|-------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------|--|
|                                     | map<br> unit<br> <br>       | Rating class and limiting features                                                              | Value                                     | Rating class and limiting features                                                                    | Value                            |  |
| 590:<br>Kalifonsky                  | <br>  85<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Too sandy<br>  Rock fragment content<br>  Too acid | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.95 | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>               | <br> <br> 0.00<br> 0.00          |  |
| 591:<br>Kalifonsky                  | <br>  50<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Too sandy<br>  Rock fragment content<br>  Too acid | <br> 0.00<br> 0.00<br> 0.00<br> 0.95      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br> <br>          | <br> <br> 0.00<br> 0.00          |  |
| Typic Cryorthents                   | 30<br> <br> <br> <br>       | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid             | <br> 0.00<br> 0.00<br> 0.32<br> 0.88      | <br> Poor:<br>  Slope<br>  Moderate frost action (check<br>  lower layers)<br>                        | <br> 0.00<br> 0.50<br>           |  |
| 592:<br>Karluk                      | <br>  80<br> <br>           | <br> Poor:<br>  Depth to dense layer<br>  Depth to saturated zone<br>  Too acid                 | <br> 0.00<br> 0.01<br> 0.88               | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.00<br> 0.01 |  |
| 593:<br>Kashwitna                   | <br>  85<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Too acid                              | <br> 0.00<br> 0.00<br> 0.99               | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                                       | <br> <br> 0.00<br>               |  |
| 594:<br>Kashwitna                   | <br>  88<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Too acid                              | <br> 0.00<br> 0.00<br> 0.99               | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                                       | <br> <br> 0.00<br>               |  |
| 595:<br>Kashwitna                   | <br>  85<br> <br> <br> <br> | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Slope<br>  Too acid                   | <br> 0.00<br> 0.00<br> 0.37<br> 0.99      | <br> Poor:<br>  High frost action (check lower layers)<br> <br> <br>                                  | <br> <br> 0.00<br> <br> <br>     |  |
| 596:<br>Kashwitna, moderately steep | <br>  50<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Too sandy<br>  Too acid                   | <br> 0.00<br> 0.00<br> 0.00<br> 0.99      | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope<br>                                 | <br> 0.00<br> 0.00               |  |
| Kashwitna, strongly sloping         | 40<br> <br> <br> <br>       | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Slope<br>  Too acid                   | <br> 0.00<br> 0.00<br> 0.04<br> 0.99      | <br> Poor:<br>  High frost action (check lower layers)<br> <br> <br>                                  | <br> 0.00<br> <br> <br>          |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name        | <br> Pct,<br>  of<br> map    | (Alaska criteria)                             |                              | Potential source of roadfill (Alaska criteria)                                                                 |                                           |
|---------------------------------|------------------------------|-----------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                 | unit<br> unit<br> <br>       | Rating class and limiting features            | Value<br> <br>               | Rating class and limiting features                                                                             | Value                                     |
| 597:<br>Kenai                   | <br>   81<br> <br> <br>      | <br> <br> Good source<br> <br> <br> <br>      |                              | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell            | <br> <br> 0.00<br> 0.50<br> <br> 0.98     |
| 598:<br>Kenai                   | <br>   82<br> <br> <br>      | <br> <br> Good source<br> <br> <br> <br>      |                              | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell            | <br> 0.00<br> 0.50<br> <br> 0.98          |
| 599:<br>Kenai                   | 85<br> <br> <br> <br>        | <br> Fair:<br>  Slope<br> <br> <br>           | <br> 0.63<br> <br>           | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell            | <br> 0.00<br> 0.50<br> <br> 0.98          |
| 600:<br>Kenai                   | <br>   88<br> <br> <br> <br> | <br> Poor:<br>  Slope<br> <br> <br> <br>      | <br> 0.00<br> <br>           | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Slope<br>  Shrink-swell | <br> 0.00<br> 0.50<br> <br> 0.50<br> 0.98 |
| 601:<br>Kenai                   | <br>  86<br> <br> <br>       | <br> Poor:<br>  Slope<br> <br> <br>           | <br> <br> 0.00<br> <br> <br> | <br> Poor:<br>  Slope<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell | <br> 0.00<br> 0.00<br> 0.50<br> <br> 0.98 |
| 602:<br>Kenai, moderately steep | 45<br> <br> <br> <br>        | <br> Poor:<br>  Slope<br> <br> <br>           |                              | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell<br>  Slope | <br> 0.00<br> 0.50<br> <br> 0.98<br> 0.98 |
| Kenai, gently sloping           | 40<br> <br> <br> <br>        | <br> Good source<br> <br> <br> <br> <br> <br> |                              | Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell                 | <br> 0.00<br> 0.50<br> <br> 0.98          |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name |                         | Pct,   Potential source of topsoil     of   (Alaska criteria)                   |                                  | Potential source of roadfill<br>(Alaska criteria)                                                   |                                       |
|--------------------------|-------------------------|---------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------|
|                          | unit<br> unit<br>       | Rating class and limiting features                                              | Value                            | Rating class and   limiting features                                                                | Value                                 |
| 603:<br>Kenai            | 60<br> <br>             | <br> <br> Fair:<br>  Slope<br> <br> <br>                                        | <br> <br> 0.37<br> <br>          | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell | <br> <br> 0.00<br> 0.50<br> <br> 0.98 |
| Starichkof               | 31                      | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> 0.00<br> 0.00<br> 0.50      | Poor:<br>  Depth to saturated zone<br>  High frost action(check lower layers)                       | <br> 0.00<br> 0.00                    |
| 604:<br>Kichatna         | 70                      | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim                      | <br> <br> 0.00<br> 0.50          | <br> Good source<br>                                                                                |                                       |
| 605:<br>Kichatna         | 75<br> <br>             | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Hard to reclaim           | <br> 0.00<br> 0.37<br> 0.50      | <br> Good source<br> <br>                                                                           |                                       |
| 606:<br>Kichatna         | 75<br>                  | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim           | <br> <br> 0.00<br> 0.00<br> 0.50 | <br> Fair:<br>  Slope<br> <br>                                                                      | <br> <br> 0.50<br>                    |
| 607:<br>Kichatna         | 85<br> <br>             | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim           | <br> 0.00<br> 0.00<br> 0.50      | <br> Poor:<br>  Slope<br>                                                                           | <br> <br> 0.00<br>                    |
| 608:<br>Kichatna         | 70<br> <br>             | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim           | <br> <br> 0.00<br> 0.00<br> 0.50 | <br> Poor:<br>  Slope<br>                                                                           | <br> <br> 0.00<br>                    |
| 609:<br>Kichatna         | 50                      | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim           | <br> <br> 0.00<br> 0.00<br> 0.50 | <br> Poor:<br>  Slope<br>                                                                           | <br> <br> 0.00<br>                    |
| Killey                   | 50<br> <br>             | <br> Fair:<br>  Depth to saturated zone<br>  Too acid                           | <br> <br> 0.12<br> 0.88          | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone                  | <br> 0.00<br> 0.12                    |
| 610:<br>Kidazqeni        | <br>   85<br> <br> <br> | <br> Poor:<br>  Too sandy<br>  Rock fragment content<br>  Hard to reclaim       | <br> 0.00<br> 0.00<br> 0.02      | <br> Good source<br> <br> <br> <br>                                                                 |                                       |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name    |                       | Pct,   Potential source of topsoil   of   (Alaska criteria)                             |                                           | Potential source of roadfill (Alaska criteria)                                                           |                                           |  |
|-----------------------------|-----------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------|--|
|                             | map<br> unit<br> <br> | · · · · · · · · · · · · · · · · · · ·                                                   | Value                                     | Rating class and   limiting features                                                                     | Value                                     |  |
| 611:<br>Killey              | 45<br> <br>           | <br> <br> Fair:<br>  Depth to saturated zone<br>  Too acid                              | <br> <br> 0.12<br> 0.88                   | <br>  Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone                      | <br> <br> 0.00<br> 0.12                   |  |
| Moose River                 | 45<br> <br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Hard to reclaim<br>  Rock fragment content | <br> 0.00<br> 0.12<br> 0.18               | <br> Poor:<br>  Depth to saturated zone<br>  High frost action(check lower layers)<br>                   | <br> 0.00<br> 0.00                        |  |
| 612:<br>Liten               | 85<br>                | <br> <br> Poor:<br>  Too sandy                                                          | 0.00                                      | <br> <br> Good source<br>                                                                                |                                           |  |
| 613:<br>Lithic Haplocryands | 55<br> <br> <br> <br> | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid    | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.88 | <br> Poor:<br>  Depth to bedrock<br>  Slope<br>  High frost action(check lower layers)<br>  Low strength | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.78 |  |
| Alic Haplocryands           | 20                    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid    | <br> 0.00<br> 0.12<br> 0.67<br> 0.88      | <br> Poor:<br>  Depth to bedrock<br>  Slope<br>  High frost action(check lower layers)                   | <br> 0.00<br> 0.00<br> 0.00               |  |
| Rock outcrop                | <br>17                | <br> Not rated                                                                          |                                           | <br> Not rated                                                                                           |                                           |  |
| 614:<br>Lithic Haplocryands | 55<br> <br> <br> <br> | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid    | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.88 | <br> Poor:<br>  Depth to bedrock<br>  Slope<br>  High frost action(check lower layers)<br>  Low strength | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.78 |  |
| Alic Haplocryands           | 20                    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid    | 0.00<br>0.12                              |                                                                                                          | <br> 0.00<br> 0.00<br> 0.00               |  |
| Rock outcrop                | 20                    | <br> Not rated                                                                          |                                           | <br> Not rated                                                                                           |                                           |  |
| 615:<br>Longmare            | 80                    | <br> Fair:<br>  Depth to saturated zone<br> <br>  Too acid                              | <br> 0.53<br> <br> 0.95                   | <br> Fair:<br>  Moderate frost action (check<br>  lower layers)<br>  Depth to saturated zone             | <br> <br> 0.50<br> <br> 0.53              |  |
| 616:<br>Longmare            | 80<br> <br> <br>      | <br> Fair:<br>  Depth to saturated zone<br> <br>  Too acid                              | <br> <br> 0.53<br> <br> 0.95              | <br> Fair:<br>  Moderate frost action (check lower<br>  layers)<br>  Depth to saturated zone             | <br> <br> 0.50<br> <br> 0.53              |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name |                       | Potential source of topso (Alaska criteria)                                         | il                                   | Potential source of roadfill (Alaska criteria)                                                  |                             |  |
|--------------------------|-----------------------|-------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|--|
|                          | map<br> unit<br> <br> | Rating class and limiting features                                                  | Value                                | Rating class and   limiting features                                                            | Value                       |  |
| 617:<br>Mutnala          | 75<br> <br>           | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid            | <br> <br> 0.00<br> 0.95<br> 0.99     | <br>  Poor:<br>  High frost action(check lower layers)<br>                                      | <br> <br> 0.00              |  |
| 618:<br>Mutnala          | 80                    | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid            | <br> 0.00<br> 0.95<br> 0.99          | <br> Poor:<br>  High frost action(check lower layers)<br>                                       | <br> <br> 0.00<br>          |  |
| 619:<br>Mutnala          | 85<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.37<br> 0.95<br> 0.99 | <br> Poor:<br>  High frost action(check lower layers)<br> <br> <br>                             | <br> <br> 0.00<br> <br>     |  |
| 620:<br>Mutnala          | 85<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.00<br> 0.95<br> 0.99 | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br>                            | <br> <br> 0.00<br> 0.50     |  |
| 621:<br>Mutnala          | 85<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.00<br> 0.95<br> 0.99 | <br> Poor:<br>  Slope<br>  High frost action(check lower layers)<br>                            | <br> <br> 0.00<br> 0.00     |  |
| 622:<br>Mutnala          | 85<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.00<br> 0.95<br> 0.99 | <br> Poor:<br>  Slope<br>  High frost action(check lower layers)<br>                            | <br> <br> 0.00<br> 0.00     |  |
| 623:<br>Mutnala          | 45<br> <br> <br> <br> | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.00<br> 0.95<br> 0.99 | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br>                            | <br> <br> 0.00<br> 0.50     |  |
| Starichkof               | 35                    | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid     | <br> 0.00<br> 0.00<br> 0.50          | Poor:<br>  Depth to saturated zone<br>  High frost action(check lower layers)                   | <br> 0.00<br> 0.00          |  |
| Slikok                   | 20                    | <br> Poor:<br>  Depth to saturated zone<br>  Too acid<br> <br>                      | <br> 0.00<br> 0.98<br>               | Poor:<br>  Depth to saturated zone<br>  High frost action(check lower layers)<br>  Low strength | <br> 0.00<br> 0.00<br> 0.22 |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name           |                       | Pct,   Potential source of topsoil  <br>  of   (Alaska criteria)           |                                  | Potential source of roadfill (Alaska criteria)                              |                         |  |
|------------------------------------|-----------------------|----------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------|-------------------------|--|
|                                    | map<br> unit<br> <br> | :                                                                          | Value                            | Rating class and limiting features                                          | Value                   |  |
| 624:<br>Naptowne                   | <br> <br>  80<br>     | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer            | <br> <br> 0.00<br> 0.00          | <br>                                                                        | 0.00                    |  |
| 625:<br>Naptowne                   | 80<br> <br>           | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer            | <br> <br> 0.00<br> 0.00          | <br> <br> Poor:<br>  High frost action(check lower layers)<br>              | <br> <br> 0.00          |  |
| 626:<br>Naptowne                   | <br>   80<br> <br>    | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer<br>  Slope | <br> 0.00<br> 0.00<br> 0.84      | <br> Poor:<br>  High frost action(check lower layers)<br> <br>              | <br> <br> 0.00<br>      |  |
| 627:<br>Naptowne                   | <br>   80<br> <br>    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to dense layer | <br> 0.00<br> 0.00<br> 0.00      | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br>        | <br> <br> 0.00<br> 0.50 |  |
| 628:<br>Naptowne                   | <br>   80<br> <br>    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to dense layer | <br> 0.00<br> 0.00<br> 0.00      | <br> Poor:<br>  Slope<br>  High frost action(check lower layers)            | <br> <br> 0.00<br> 0.00 |  |
| 629:<br>Naptowne                   | <br>   80<br>         | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer            | <br> <br> 0.00<br> 0.00          | <br> Poor:<br>  High frost action(check lower layers)<br>                   | <br> <br> 0.00          |  |
| 630:<br>Naptowne, moderately steep | <br>   45<br> <br>    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to dense layer | <br> 0.00<br> 0.00<br> 0.00      | <br>   <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br> | <br> <br> 0.00<br> 0.00 |  |
| Naptowne, strongly sloping         | 40<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer<br>  Slope | <br> 0.00<br> 0.00<br> 0.04      | <br> Poor:<br>  High frost action(check lower layers)<br> <br>              | <br> 0.00<br>           |  |
| 631: Naptowne, strongly sloping    | 45<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer<br>  Slope | <br> <br> 0.00<br> 0.00<br> 0.37 | <br> -<br> Poor:<br>  High frost action(check lower layers)<br> <br>        | <br> <br> 0.00<br>      |  |
| Naptowne, gently sloping           | 40<br> <br>           | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer            | <br> <br> 0.00<br> 0.00          | <br> Poor:<br>  High frost action(check lower layers)<br>                   | <br> <br> 0.00<br>      |  |
| 632:<br>Niklason                   | 85<br> <br>           | <br> <br> Fair:<br>  Hard to reclaim<br> <br>                              | <br> <br> <br> 0.88<br>          | <br> Fair:<br>  Moderate frost action (check lower<br>  layers)             | <br> <br> 0.50          |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name                 |                              | Pct,   Potential source of topsoil       of   (Alaska criteria)     map                                      |                                               | Potential source of roadfill (Alaska criteria)                                                       |                                  |  |
|------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|--|
|                                          | map<br> unit<br>             | Rating class and Imiting features                                                                            | Value                                         | Rating class and limiting features                                                                   | Value                            |  |
| 633:<br>Nikolaevsk                       | <br> - 85<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Depth to saturated zone<br>  Hard to reclaim       | <br> <br> 0.00<br> 0.00<br> 0.06<br> 0.32     | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone                   | <br> <br> 0.00<br> 0.06<br>      |  |
| 634:<br>Nikolaevsk                       | <br> - 83<br> <br> <br> <br> | <br> Poor:<br>  Rock fragment content<br>  Too sandy<br>  Depth to saturated zone<br>  Hard to reclaim       | <br> 0.00<br> 0.00<br> 0.06<br> 0.32          | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone<br> <br>          | <br> 0.00<br> 0.06<br>           |  |
| 635:<br>Nikolaevsk                       | <br> - 85<br> <br> <br> <br> | Poor:<br>  Rock fragment content<br>  Too sandy<br>  Depth to saturated zone<br>  Hard to reclaim<br>  Slope | <br> 0.00<br> 0.00<br> 0.06<br> 0.32<br> 0.63 | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone<br> <br>          | <br> 0.00<br> 0.06<br>           |  |
| 636:<br>Nikolai                          | <br> - 90<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid                         | <br> 0.00<br> 0.00<br> 0.32                   | <br> Poor:<br>  Depth to saturated zone<br>  High frost action(check lower layers)<br>               | <br> 0.00<br> 0.00               |  |
| 637:<br>Nikolai, somewhat poorly drained | <br> -  60<br> <br>          | <br> Poor:<br>  Content of organic matter<br>  Too acid<br>  Depth to saturated zone                         | <br> 0.00<br> 0.32<br> 0.59                   | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone<br>               | <br> <br> 0.00<br> 0.59          |  |
| Tuxedni                                  | <br>- 25<br> <br> <br>       | Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Too acid                                  | <br> 0.00<br> 0.50<br> 0.95                   | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone                   | <br> 0.00<br> 0.50               |  |
| 638:<br>Puntilla                         | <br>- 80<br>                 | <br> Fair:<br>  Too acid<br>                                                                                 | <br> <br> 0.59                                | <br> -<br> Poor:<br>  High frost action(check lower layers)<br>                                      | <br> <br> 0.00                   |  |
| 639:<br>Puntilla                         | <br> - 85<br> <br>           | <br> Poor:<br>  Slope<br>  Too acid                                                                          | <br> <br> 0.00<br> 0.59                       | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope                                     | <br> <br> 0.00<br> 0.92          |  |
| 640:<br>Qutal                            | <br> <br>- 77<br> <br> <br>  | <br> Fair:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Not hard to reclaim                  | <br> <br> 0.53<br> 0.88<br> 0.99              | <br> Poor:<br>  High frost action(check lower layers)<br>  Low strength<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.22<br> 0.53 |  |
| 641:<br>Qutal                            | <br> - 80<br> <br> <br>      | <br> Fair:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Not hard to reclaim                  | <br> 0.53<br> 0.88<br> 0.99                   | <br> Poor:<br>  High frost action(check lower layers)<br>  Low strength<br>  Depth to saturated zone | <br> 0.00<br> 0.22<br> 0.53      |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name          | <br> Pct,<br>  of<br> map    | (Alaska criteria)                                                                                      | oil                                       | Potential source of roadfill (Alaska criteria)                                                       |                                  |  |  |
|-----------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|--|--|
|                                   |                              | Rating class and Imiting features                                                                      | Value                                     | Rating class and limiting features                                                                   | Value                            |  |  |
| 642:<br>Qutal                     | 80                           | <br> Fair:<br>  Depth to saturated zone<br>  Slope<br>  Rock fragment content<br>  Not hard to reclaim | <br> <br> 0.53<br> 0.63<br> 0.88<br> 0.99 | <br> Poor:<br>  High frost action(check lower layers)<br>  Low strength<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.22<br> 0.53 |  |  |
| 643:<br>Redoubt, terraces         | <br>   85<br> <br> <br>      | <br> Fair:<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid                          | <br> <br> 0.03<br> 0.12<br> 0.41          | <br> Poor:<br>  High frost action(check lower layers)<br> <br>                                       | <br> <br> 0.00<br>               |  |  |
| 644:<br>Redoubt                   | <br>  85<br> <br> <br>       | <br> Fair:<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid<br>  Slope               | <br> 0.03<br> 0.12<br> 0.41<br> 0.84      | <br> Poor:<br>  High frost action(check lower layers)<br> <br> <br>                                  | 0.00                             |  |  |
| 645:<br>Redoubt                   | <br>  85<br> <br>            | <br> Poor:<br>  Slope<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid               | <br> <br> 0.00<br> 0.03<br> 0.12<br> 0.41 | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br>                                 | <br> <br> 0.00<br> 0.00<br>      |  |  |
| 646:<br>Redoubt, cool             | 80                           | <br> Fair:<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid                          | 0.03<br> 0.12<br> 0.41                    | <br> Poor:<br>  High frost action(check lower layers)<br> <br>                                       | <br> <br> 0.00<br>               |  |  |
| 647:<br>Redoubt, moderately steep | <br>   45<br> <br> <br>      | <br> Poor:<br>  Slope<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid               | <br> <br> 0.00<br> 0.03<br> 0.12<br> 0.41 | <br> Poor:<br>  High frost action(check lower layers)<br>  Slope<br>                                 | <br> <br> 0.00<br> 0.98<br>      |  |  |
| Redoubt, gently sloping           | <br>  40<br> <br>            | <br> Fair:<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid                          | <br> 0.03<br> 0.12<br> 0.41               | <br> Poor:<br>  High frost action(check lower layers)<br> <br>                                       | <br> 0.00<br>                    |  |  |
| 648:<br>Redoubt, cool             | <br>   55<br> <br> <br> <br> | <br> Fair:<br>  Depth to dense layer<br>  Rock fragment content<br>  Too acid<br>  Slope               | <br> 0.03<br> 0.12<br> 0.41<br> 0.96      | <br> Poor:<br>  High frost action(check lower layers)<br> <br>                                       | <br> <br> 0.00<br> <br>          |  |  |
| Tuxedni                           | <br>  35<br> <br> <br> <br>  | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Too acid<br>  Slope<br>        | <br> 0.00<br> 0.50<br> 0.95<br> 0.96      | <br> Poor:<br>  High frost action(check lower layers)<br>  Depth to saturated zone<br> <br>          | <br> 0.00<br> 0.50<br>           |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of     | (Alaska criteria)                                                                       | il                               | Potential source of roadfill (Alaska criteria)                                                          |                                  |  |  |
|--------------------------|-----------------------|-----------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------|--|--|
|                          | map<br> unit<br> <br> | :                                                                                       | Value                            | Rating class and limiting features                                                                      | Value                            |  |  |
| 649:<br>Riverwash        | 100                   | <br> <br> Not rated<br>                                                                 |                                  | <br> <br> Not rated<br>                                                                                 |                                  |  |  |
| 650:<br>Salamatof        | <br>  70<br>          | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid    | <br> 0.00<br> 0.00<br> 0.12      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                     | <br> 0.00<br> 0.00               |  |  |
| Doroshin                 | 22                    | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid    | <br> 0.00<br> 0.00<br> 0.50      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                 | <br> 0.00<br> 0.00               |  |  |
| 651:<br>Salamatof        | 80<br> <br>           | Poor:   Depth to saturated zone   Content of organic matter   Too acid                  | <br> 0.00<br> 0.00<br> 0.12      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                     | <br> <br> 0.00<br> 0.00          |  |  |
| 652:<br>Slikok           | 85<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Too acid<br>                               | <br> <br> 0.00<br> 0.98          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength   | <br> <br> 0.00<br> 0.00<br> 0.22 |  |  |
| 653:<br>Slikok           | 82<br> <br>           | <br> Poor:<br>  Depth to saturated zone<br>  Too acid<br>                               | <br> <br> 0.00<br> 0.98          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength   | <br> <br> 0.00<br> 0.00<br> 0.22 |  |  |
| 654:<br>Smithfha         | 85<br> <br>           | <br> <br> Good source<br> <br>                                                          |                                  | <br> Fair:<br>  Moderate frost action (check<br>  lower layers)                                         | <br> <br> <br> 0.50              |  |  |
| 655:<br>Smithfha         | 90<br> <br>           | <br> Poor:<br>  Slope<br>                                                               | <br> <br> 0.00<br>               | <br> Poor:<br>  Slope<br>  Moderate frost action (check<br>  lower layers)                              | <br> <br> 0.00<br> 0.50          |  |  |
| 656:<br>Smokey Bay       | 77<br>                | <br> Fair:<br>  Depth to saturated zone<br>  Rock fragment content                      | <br> <br> 0.04<br> 0.50          | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone                     | <br> <br> 0.00<br> 0.04          |  |  |
| 657:<br>Smokey Bay       | 77<br> <br> <br>      | <br> Fair:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Slope           | <br> <br> 0.04<br> 0.50<br> 0.63 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone                     | <br> <br> 0.00<br> 0.04<br>      |  |  |
| 658:<br>Snowdance        | 90<br> <br> <br>      | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Hard to reclaim | <br> 0.00<br> 0.04<br> 0.92      | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>  Cobble content | <br> <br> 0.00<br> 0.04<br> 0.77 |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name           | <br> Pct,<br>  of<br> map | (Alaska criteria)                                        |                                  | Potential source of roadfill<br>  (Alaska criteria)               |                         |  |  |
|------------------------------------|---------------------------|----------------------------------------------------------|----------------------------------|-------------------------------------------------------------------|-------------------------|--|--|
|                                    | unit<br> <br>             | Rating class and limiting features                       | Value<br> <br>                   | Rating class and limiting features                                | Value                   |  |  |
| 659:<br>Soldotna                   | <br>  90<br>              | <br> <br> Fair:<br>  Hard to reclaim<br>  Too acid       | <br> <br> 0.98<br> 0.98          | <br>                                                              | <br> <br> <br> 0.00     |  |  |
| 660:<br>Soldotna                   | 90<br> <br>               | <br> Fair:<br>  Hard to reclaim<br>  Too acid            | <br> <br> 0.98<br> 0.98          | <br> Poor:<br>  High frost action (check lower layers)<br>        | <br> <br> 0.00          |  |  |
| 661:<br>Soldotna                   | <br>  85<br> <br> <br>    | <br> Fair:<br>  Slope<br>  Hard to reclaim<br>  Too acid | <br> 0.37<br> 0.98<br> 0.98      | <br> Poor:<br>  High frost action (check lower layers)<br> <br>   | 0.00                    |  |  |
| 662:<br>Soldotna                   | <br>   85<br> <br> <br>   | <br> Poor:<br>  Slope<br>  Hard to reclaim<br>  Too acid | <br> 0.00<br> 0.98<br> 0.98      | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope | <br> 0.00<br> 0.50      |  |  |
| 663:<br>Soldotna, sandy substratum | 80<br>                    | <br> Fair:<br>  Too acid                                 | <br> <br> 0.98                   | <br> Poor:<br>  High frost action (check lower layers)            | 0.00                    |  |  |
| 664:<br>Soldotna, sandy substratum | 75<br> <br>               | <br> Fair:<br>  Slope<br>  Too acid                      | <br> 0.63<br> 0.98               | <br> Poor:<br>  High frost action (check lower layers)            | 0.00                    |  |  |
| 665:<br>Soldotna, sandy substratum | <br>  80<br> <br>         | <br> Poor:<br>  Slope<br>  Too acid                      | <br> <br> 0.00<br> 0.98          | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope | <br> <br> 0.00<br> 0.50 |  |  |
| 666:<br>Soldotna, sandy substratum | 80<br> <br>               | <br> Fair:<br>  Too acid                                 | <br> <br> 0.98                   | <br> Poor:<br>  High frost action (check lower layers)            | 0.00                    |  |  |
| 667:<br>Soldotna, strongly sloping | <br>  45<br> <br>         | <br> Fair:<br>  Slope<br>  Hard to reclaim<br>  Too acid | <br> <br> 0.84<br> 0.98<br> 0.98 | <br> Poor:<br>  High frost action (check lower layers)<br> <br>   | <br> <br> 0.00<br>      |  |  |
| Soldotna, gently sloping           | <br>  40<br> <br>         | <br> Fair:<br>  Hard to reclaim<br>  Too acid<br>        | <br> 0.98<br> 0.98               | <br> Poor:<br>  High frost action (check lower layers)<br> <br>   | <br> <br> 0.00<br>      |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name           | <br> Pct,<br>  of       | Potential source of topso<br>(Alaska criteria)                                       | oil                              | Potential source of roadfill (Alaska criteria)                                                                          |                                           |  |  |
|------------------------------------|-------------------------|--------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|--|
|                                    | map<br> unit<br> <br>   | Rating class and limiting features                                                   | Value                            | Rating class and   limiting features                                                                                    | Value                                     |  |  |
| 668:<br>Soldotna, sandy substratum | 55<br> <br>             | <br> Poor:<br>  Slope<br>  Too acid                                                  | <br> <br> 0.00<br> 0.98          | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)                                                       | <br> <br> <br> 0.00<br> 0.00              |  |  |
| Kenai                              | 40<br> <br> <br> <br>   | <br> Poor:<br>  Slope<br> <br> <br> <br>                                             | <br> 0.00<br> <br> <br> <br>     | <br> Poor:<br>  Slope<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell          | <br> 0.00<br> 0.00<br> 0.50<br> <br> 0.98 |  |  |
| 669:<br>Soldotna, sandy substratum | 55<br>                  | <br> Fair:<br>  Too acid Hard to reclaim                                             | <br> <br> 0.98                   | <br> Poor:<br>  High frost action (check lower layers)                                                                  | <br> <br> 0.00                            |  |  |
| Kenai                              | 40<br> <br> <br>        | <br> Good source<br> <br> <br> <br>                                                  |                                  | <br> Poor:<br>  Low strength<br>  Moderate frost action (check<br>  lower layers)<br>  Shrink-swell                     | <br> 0.00<br> 0.50<br> <br> 0.98          |  |  |
| 670:<br>Soldotna                   | 50                      | <br> Fair:<br>  Slope<br>  Hard to reclaim<br>  Too acid                             | <br> 0.37<br> 0.98<br> 0.98      | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                                                         | <br> <br> 0.00<br>                        |  |  |
| Kichatna                           | 40<br> <br> <br>        | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Hard to reclaim                | <br> 0.00<br> 0.37<br> 0.50      | <br> Good source<br> <br> <br>                                                                                          | <br> <br> <br> <br>                       |  |  |
| 671:<br>Soldotna                   | 50<br> <br>             | <br> Poor:<br>  Slope<br>  Hard to reclaim<br>  Too acid                             | <br> <br> 0.00<br> 0.98<br> 0.98 | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)<br>                                                   | <br> <br> 0.00<br> 0.00                   |  |  |
| Kichatna                           | 40<br> <br> <br>        | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim                | <br> 0.00<br> 0.00<br> 0.50      | <br> Poor:<br>  Slope<br> <br>                                                                                          | <br> 0.00<br> <br>                        |  |  |
| 672:<br>Soldotna                   | 55<br> <br>             | <br> Fair:<br>  Hard to reclaim<br>  Too acid                                        | <br> <br> 0.98<br> 0.98          | <br> Poor:<br>  High frost action (check lower layers)<br>                                                              | <br> <br> 0.00<br>                        |  |  |
| Nikolai                            | 45<br> <br> <br>        | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> 0.00<br> 0.00<br> 0.32      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                                 | <br> 0.00<br> 0.00                        |  |  |
| 673:<br>Spenard                    | <br>   89<br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid     | <br> 0.00<br> 0.88<br> 0.88      | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength<br>  Shrink-swell | <br> 0.00<br> 0.00<br> 0.78<br> 0.98      |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name     | <br> Pct,<br>  of     | Potential source of topsoi (Alaska criteria)                                                | il                                   | Potential source of roadfill<br>(Alaska criteria)                                                                       |                                           |  |  |
|------------------------------|-----------------------|---------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--|--|
|                              | map<br> unit<br> <br> | Rating class and limiting features                                                          | Value                                | Rating class and limiting features                                                                                      | Value                                     |  |  |
| 674:<br>Spenard              | 67<br> <br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid            | <br> <br> 0.00<br> 0.88<br> 0.88     | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength<br>  Shrink-swell | <br> <br> 0.00<br> 0.00<br> 0.78<br> 0.98 |  |  |
| 675:<br>Spenard              | 87<br> <br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Slope<br>  Rock fragment content<br>  Too acid | <br> 0.00<br> 0.37<br> 0.88<br> 0.88 |                                                                                                                         | <br> <br> 0.00<br> 0.00<br> 0.78<br> 0.98 |  |  |
| 676:<br>Starichkof           | 60<br>                | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid        | <br> <br> 0.00<br> 0.00<br> 0.50     | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                                 | <br> <br> 0.00<br> 0.00                   |  |  |
| Doroshin                     | 35<br> <br> <br>      | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid             | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                                 | <br> 0.00<br> 0.00                        |  |  |
| 677:<br>Starichkof           | <br>  75<br> <br>     | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid             | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                                     | <br> 0.00<br> 0.00                        |  |  |
| 678:<br>Starichkof           | 82<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid        | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                                     | <br> 0.00<br> 0.00                        |  |  |
| 679:<br>Starichkof, forested | 85<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid        | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                                     | <br> 0.00<br> 0.00                        |  |  |
| 680:<br>Starichkof           | 45<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid        | <br> <br> 0.00<br> 0.00<br> 0.50     | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>                                 | <br> <br> 0.00<br> 0.00                   |  |  |
| Slikok                       | 30<br> <br> <br>      | <br> Poor:<br>  Depth to saturated zone<br>  Slope<br>  Too acid                            | <br> 0.00<br> 0.84<br> 0.98          | Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength                        | <br> 0.00<br> 0.00<br> 0.22               |  |  |
| Naptowne                     | <br>  25<br> <br>     | <br> Poor:<br>  Rock fragment content<br>  Depth to dense layer 0.00                        | <br> <br> 0.00<br>                   | <br> Poor:<br>  High frost action (check lower layers)<br>                                                              | <br> <br> 0.00                            |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name  | <br> Pct,<br>  of<br> map    | (Alaska criteria)                                                                    | I                                    | Potential source of roadfill (Alaska criteria)                                                                          |                                      |  |  |
|---------------------------|------------------------------|--------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|--|
|                           | unit<br> <br> <br>           |                                                                                      | Value                                | Rating class and limiting features                                                                                      | Value                                |  |  |
| 681:<br>Starichkof        | <br> <br> 50<br>             | <br> Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid | <br> <br> 0.00<br> 0.00<br> 0.50     | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                                     | <br> <br> 0.00<br> 0.00              |  |  |
| Spenard                   | <br>  42<br> <br> <br> <br>  | Poor:<br>  Depth to saturated zone<br>  Rock fragment content<br>  Too acid          | <br> 0.00<br> 0.88<br> 0.88          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br>  Low strength<br>  Shrink-swell | <br> 0.00<br> 0.00<br> 0.78<br> 0.98 |  |  |
| 682:<br>Susitna           | <br>  85<br>                 | <br> <br> Good source<br> <br>                                                       |                                      | <br> Fair:<br>  Moderate frost action (check<br>  lower layers)                                                         | <br> <br> 0.50                       |  |  |
| Riverwash                 | 5                            | <br> Not rated                                                                       |                                      | <br> Not rated                                                                                                          |                                      |  |  |
| 683:<br>Susitna           | <br> <br>  85<br> <br>       | <br> <br> Good source<br> <br>                                                       |                                      | <br> Fair:<br>  Moderate frost action (check<br>  lower layers)                                                         | <br> <br> 0.50                       |  |  |
| 684:<br>Talkeetna         | <br> <br> 94<br> <br>        | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid             | <br> 0.00<br> 0.50<br> 0.92          | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                                                         | <br> <br> 0.00<br>                   |  |  |
| 685:<br>Talkeetna         | <br> -<br>  90<br> <br> <br> | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid  | <br> 0.00<br> 0.00<br> 0.50<br> 0.92 | <br> Poor:<br>  High frost action (check lower layers)<br>  Slope<br>                                                   | <br> <br> 0.00<br> 0.00              |  |  |
| 686:<br>Talkeetna         | <br> <br>  55<br> <br> <br>  | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Hard to reclaim<br>  Too acid  |                                      | <br> Poor:<br>  High frost action (check lower layers)<br> <br> <br>                                                    | <br> <br> 0.00<br> <br>              |  |  |
| Starichkof                | <br> 40<br> <br> <br>        | Poor:<br>  Depth to saturated zone<br>  Content of organic matter<br>  Too acid      | <br> 0.00<br> 0.00<br> 0.50          | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br> <br>                            | <br> 0.00<br> 0.00                   |  |  |
| 687:<br>Tangerra          | <br> <br> 80<br> <br>        | <br> Poor:<br>  Depth to saturated zone<br>                                          | 0.00                                 | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)                                     | <br> <br> 0.00<br> 0.00              |  |  |
| 688: Beaches, tidal flats | <br>  90<br>                 | <br> Not rated<br>                                                                   | <u> </u>                             | <br> Not rated<br>                                                                                                      |                                      |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of<br> map | Potential source of topso (Alaska criteria)                                          | il                                   | Potential source of roadfill (Alaska criteria)                                      |                                      |  |  |
|--------------------------|---------------------------|--------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------|--|--|
|                          | map<br> unit<br> <br>     | Rating class and limiting features                                                   | Value                                | Rating class and limiting features                                                  | Value                                |  |  |
| 689:<br>Tlikakila        | 90                        | <br> <br> Fair:<br>  Depth to saturated zone<br>  Too acid                           | <br> <br> 0.20<br> 0.41              | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.20              |  |  |
| 690:<br>Tlikakila        | 87                        | <br> Fair:<br>  Depth to saturated zone<br>  Too acid                                | <br> <br> 0.20<br> 0.41              | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.20              |  |  |
| 691:<br>Tlikakila        | <br>   85<br> <br>        | <br> Fair:<br>  Depth to saturated zone<br>  Slope<br>  Too acid                     | <br> <br> 0.20<br> 0.37<br> 0.41     | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone | <br> <br> 0.00<br> 0.20              |  |  |
| 692:<br>Tokositna        | 85<br> <br>               | İ                                                                                    | <br> 0.00<br> 0.12                   | <br> Poor:<br>  High frost action (check lower layers)                              | 0.00                                 |  |  |
| 693:<br>Tokositna        | 90                        | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim                           | <br> <br> 0.00<br> 0.12              | <br> Poor:<br>  High frost action (check lower layers)<br>                          | 0.00                                 |  |  |
| 694:<br>Tokositna        | 90<br> <br> <br>          | <br> Poor:<br>  Rock fragment content<br>  Hard to reclaim<br>  Slope                | <br> <br> 0.00<br> 0.12<br> 0.84     | <br> Poor:<br>  High frost action (check lower layers)<br> <br>                     | <br> <br> 0.00<br>                   |  |  |
| 695:<br>Truuli           | <br>   88<br> <br> <br>   | <br> Poor:<br>  Depth to saturated zone<br>  Too acid<br>                            | <br> 0.00<br> 0.24                   |                                                                                     | <br> 0.00<br> 0.00<br> 0.78          |  |  |
| 696:<br>Tutka            | <br>  45<br> <br> <br>    | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid | <br> 0.00<br> 0.00<br> 0.00<br> 0.88 |                                                                                     | <br> 0.00<br> 0.00<br> 0.00<br> 0.00 |  |  |
| Kasitsna                 | 40<br> <br>               | <br> Poor:<br>  Slope<br>  Hard to reclaim<br>  Too acid                             | <br> 0.00<br> 0.50<br> 0.98          | <br> Poor:<br>  Slope<br>  High frost action (check lower layers)                   | <br> 0.00<br> 0.00                   |  |  |
| Rock outcrop             | <br>   15<br>             | <br> Not rated<br>                                                                   | <br>                                 | <br> Not rated<br>                                                                  | <br> <br>                            |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of       | (Alaska criteria)                                                                                      | oil                                  | Potential source of roadfill<br>(Alaska criteria)                                                         |                                           |  |  |
|--------------------------|-------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------|--|--|
|                          | map<br> unit<br> <br>   | <del></del>                                                                                            | Value                                | Rating class and limiting features                                                                        | Value                                     |  |  |
| 697:<br>Tutka            | 55<br> <br> <br> <br>   | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Depth to bedrock<br>  Too acid                   | <br> 0.00<br> 0.00<br> 0.00<br> 0.88 | <br> Poor:<br>  Depth to bedrock<br>  High frost action (check lower layers)<br>  Slope<br>  Low strength | <br> <br> 0.00<br> 0.00<br> 0.00<br> 0.00 |  |  |
| Portgraham               | 30                      | Poor:   Slope   Depth to bedrock   Rock fragment content   Too acid                                    | <br> 0.00<br> 0.27<br> 0.28<br> 0.50 | Poor:<br>  Depth to bedrock<br>  Slope<br>  High frost action (check lower layers)<br>  Low strength      | <br> 0.00<br> 0.00<br> 0.00<br> 0.00      |  |  |
| 698:<br>Tuxedni          | 85<br> <br> <br>        | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Too acid                       | <br> 0.00<br> 0.50<br> 0.95          | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone                       | <br> <br> 0.00<br> 0.50                   |  |  |
| 699:<br>Tuxedni          | <br>   85<br> <br> <br> | <br> Poor:<br>  Rock fragment content<br>  Slope<br>  Depth to saturated zone<br>  Too acid            | <br> 0.00<br> 0.37<br> 0.50<br> 0.95 | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>                   | <br> <br> 0.00<br> 0.50                   |  |  |
| 700:<br>Tuxedni, warm    | 85<br> <br> <br>        | <br> Poor:<br>  Rock fragment content<br>  Depth to saturated zone<br>  Too acid                       | <br> 0.00<br> 0.50<br> 0.95          | <br> Poor:<br>  High frost action (check lower layers)<br>  Depth to saturated zone<br>                   | <br> 0.00<br> 0.50                        |  |  |
| 701: Typic Cryaquents    | <br>   95<br> <br> <br> | <br> Poor:<br>  Depth to saturated zone<br>  Too sandy<br>  Rock fragment content<br>  Hard to reclaim | <br> 0.00<br> 0.00<br> 0.00<br> 0.95 | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br> <br>              | <br> 0.00<br> 0.00                        |  |  |
| 702: Typic Cryopsamments | 84<br> <br>             | <br> -<br> Poor:<br>  Slope                                                                            | <br> <br> 0.00                       | <br> -<br> Fair:<br>  Slope                                                                               | <br> <br> 0.50                            |  |  |
| 703: Typic Cryorthents   | <br>   80<br> <br> <br> | <br> Poor:<br>  Slope<br>  Rock fragment content<br>  Hard to reclaim<br>  Too acid                    | <br> 0.00<br> 0.00<br> 0.32<br> 0.88 | <br> Poor:<br>  Slope<br>  Moderate frost action (check lower<br>  layers)                                | <br> 0.00<br> 0.50<br>                    |  |  |
| 704:<br>Urban land       | 85<br>                  | <br> <br> Not rated<br>                                                                                |                                      | <br> Not rated<br>                                                                                        |                                           |  |  |
| 705:<br>Water, fresh     | 100<br>                 | <br> Not rated<br>                                                                                     | İ                                    | <br> Not rated<br>                                                                                        | <br> <br>                                 |  |  |
| 706:<br>Whitsol          | 90<br> <br>             | <br> Fair:<br>  Too acid<br>                                                                           | <br> <br> 0.95<br>                   | <br> Poor:<br>  High frost action(check lower layers)<br>  Low strength                                   | <br> <br> 0.00<br> 0.78                   |  |  |

Table 22. Construction Materials: Topsoil and Roadfill—Continued

| Map symbol and soil name | <br> Pct,<br>  of<br> map | Potential source of topsoi (Alaska criteria)                           | 1                               | Potential source of roadfill<br>(Alaska criteria)                                            |                             |  |  |
|--------------------------|---------------------------|------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------|-----------------------------|--|--|
|                          | unit                      | Rating class and limiting features                                     | Value                           | Rating class and limiting features                                                           | Value                       |  |  |
| 707:<br>Whitsol          | 90<br> <br>               | <br> <br> Fair:<br>  Too acid<br>                                      | <br> <br> 0.95                  | <br>                                                                                         | <br> <br> 0.00<br> 0.78     |  |  |
| 708:<br>Whitsol          | 85<br> <br>               | <br> Fair:<br>  Slope<br>  Too acid                                    | <br> <br> 0.37<br> 0.95         | <br> Poor:<br>  High frost action (check lower layers)<br>  Low strength                     | <br> <br> 0.00<br> 0.78     |  |  |
| 709:<br>Whitsol          | <br>   85<br> <br> <br>   | <br> Poor:<br>  Slope<br>  Too acid<br>                                | <br> 0.00<br> 0.95              |                                                                                              | <br> 0.00<br> 0.50<br> 0.78 |  |  |
| 710:<br>Whitsol          | <br>   85<br> <br> <br>   | <br> Poor:<br>  Slope<br>  Too acid<br>                                | <br> 0.00<br> 0.95              |                                                                                              | <br> 0.00<br> 0.00<br> 0.78 |  |  |
| 711:<br>Whitsol          | 55<br> <br>               | <br> Fair:<br>  Too acid<br>                                           | <br> <br> 0.95                  | <br> Poor:<br>  High frost action(check lower layers)<br>  Low strength                      | <br> 0.00<br> 0.78          |  |  |
| Doroshin                 | <br>  30<br> <br> <br>    | Poor:   Depth to saturated zone   Content of organic matter   Too acid | <br> 0.00<br> 0.00<br> 0.50<br> | <br> Poor:<br>  Depth to saturated zone<br>  High frost action (check lower layers)<br> <br> | <br> 0.00<br> 0.00<br>      |  |  |

Table 23. Hydric Soils List

|                                                |                            | <br>                                                                        | Hydric soils criteria          |                                    |                                 |                                |  |  |
|------------------------------------------------|----------------------------|-----------------------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform<br>  Local landform<br> <br>                                 | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 501: Aquic Cryofluvents (85%)                  | <br> <br>   No             | <br> -<br> channels on alluvial flats,<br>  alluvial fans on alluvial flats |                                |                                    | <br> <br>                       |                                |  |  |
| Susitna (10%)                                  | No                         | stream terraces                                                             |                                |                                    |                                 |                                |  |  |
| Moose River (5%)                               | Yes                        | <br> flood plains                                                           | 2B3                            | Yes                                | No                              | <br>  No                       |  |  |
| 502: Aquic Cryofluvents, shallow (80%)         | No                         | <br> <br> alluvial fans on alluvial flats,<br>  channels on alluvial flats  |                                |                                    | <br> <br> <br>                  |                                |  |  |
| Niklason (15%)                                 |                            | <br> flood plains                                                           |                                |                                    | <br>                            |                                |  |  |
| Moose River (5%)                               | Yes                        | <br> flood plains                                                           | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 503:<br>Badland, sea cliffs (100%)             | <br> <br> Unranked         | <br> <br> cliffs                                                            |                                |                                    | <br> <br>                       |                                |  |  |
| 504:<br>Badland, sea cliffs (55%)              | <br> <br> Unranked         | <br> -<br> cliffs                                                           |                                |                                    |                                 |                                |  |  |
| Typic Cryorthents (45%)                        | No                         | sea cliffs                                                                  |                                |                                    |                                 |                                |  |  |
| 505:<br>Beaches (90%)                          | <br> <br> Unranked         | <br> <br> beaches                                                           |                                |                                    |                                 |                                |  |  |
| Beaches, tidal flats (10%)                     | Unranked                   | beaches                                                                     |                                |                                    |                                 |                                |  |  |
| 506:<br>Beluga (85%)                           | <br>   Yes                 | <br> <br> alluvial fans                                                     | <br>  2B3                      | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Slikok (5%)                                    | Yes                        | depressions on till plains,<br>  flood plains                               | 2B3                            | <br>  Yes<br>                      | No                              | No                             |  |  |
| Smokey Bay (5%)                                | No                         | <br> alluvial fans                                                          |                                |                                    | ļ                               |                                |  |  |
| Starichkof (5%)                                | Yes                        | <br> fens                                                                   | 1                              | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 507:<br>Beluga (87%)                           | <br> <br>  Yes             | <br> <br> alluvial fans                                                     | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Smokey Bay (10%)                               | No                         | <br> alluvial fans                                                          | ļ                              |                                    | ļ<br>ļ                          |                                |  |  |
| Slikok (3%)                                    | Yes                        | <br> flood plains, depressions on<br>  till plains                          | <br>  2B3<br>                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 508:<br>Beluga (87%)                           | <br>   Yes                 | <br> <br> alluvial fans                                                     | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Smokey Bay (10%)                               | No                         | l<br> alluvial fans                                                         |                                |                                    |                                 |                                |  |  |
| Slikok (3%)                                    | Yes<br>                    | <br> depressions on till plains,<br>  flood plains                          | <br>  2B3<br>                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |

Table 23. Hydric Soils List—Continued

|                                                | į                          |                                                            |                                | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                             | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 509:<br>Beluga (55%)                           | Yes                        | <br> <br> alluvial fans                                    | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Mutnala (40%)                                  | No                         | <br> moraines on till plains                               |                                |                                    | <br>                            | <br>                           |  |  |
| Starichkof (5%)                                | Yes                        | fens                                                       | <br>  1                        | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 510:<br>Beluga (60%)                           | Yes                        | <br> <br> alluvial fans                                    | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Smokey Bay (37%)                               | No                         | <br> alluvial fans                                         |                                |                                    |                                 |                                |  |  |
| Slikok (3%)                                    | Yes                        | <br> alluvial fans                                         | 2B3                            | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 511:<br>Beluga (50%)                           | Yes                        | <br> <br> alluvial fans                                    | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Smokey Bay (47%)                               | No                         | l<br> alluvial fans                                        |                                |                                    |                                 |                                |  |  |
| Slikok (3%)                                    | Yes                        | l<br> alluvial fans                                        | 2B3                            | Yes                                | l No                            | No                             |  |  |
| 512:<br>Benka (86%)                            | No                         | <br> <br> outwash plains                                   |                                |                                    |                                 |                                |  |  |
| Doroshin (7%)                                  | Yes                        | depressions on till plains,<br>fens on till plains         | 1                              | <br>  Yes<br>                      | No                              | <br>  No<br>                   |  |  |
| Kalifonsky (7%)                                | Yes                        | depressions on till plains                                 | <br>  2B3                      | <br>  Yes                          | l No                            | <br>  No                       |  |  |
| 513:<br>Benka (90%)                            | <br>   No                  | <br> <br> outwash plains                                   |                                |                                    |                                 |                                |  |  |
| Iliamna (5%)                                   | No                         | <br> plains                                                |                                |                                    |                                 |                                |  |  |
| Kalifonsky (5%)                                | Yes                        | <br> depressions on till plains                            | 2B3                            | Yes                                | No                              | No                             |  |  |
| 514:<br>Benka (85%)                            | No                         | <br> <br> outwash plains                                   |                                |                                    |                                 |                                |  |  |
| Qutal (8%)                                     | No                         | depressions on till plains,<br>moraines on till plains     |                                |                                    |                                 |                                |  |  |
| Tlikakila (7%)                                 | No<br>                     | depressions on till plains, depressions on terraces        |                                |                                    |                                 |                                |  |  |
| 515:<br>Benka (90%)                            | <br> <br>  No              | <br> <br> moraines                                         |                                |                                    |                                 | <br> <br>                      |  |  |
| Chulitna (5%)                                  | No<br>                     | <br> terraces on till plains,<br>  moraines on till plains |                                |                                    | <br> <br>                       | <br>                           |  |  |
| Kalifonsky (5%)                                | Yes<br>                    | <br> depressions on till plains<br>                        | <br>  2B3<br>                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 516:<br>Benka (95%)                            | No                         | <br> moraines                                              |                                |                                    |                                 | <br>                           |  |  |
| Tlikakila (5%)                                 | No                         | depressions on terraces,<br>depressions on till plains     |                                |                                    |                                 |                                |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                            | <br>                                                          | Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|----------------------------|---------------------------------------------------------------|-----------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | <br>  Local landform<br> <br>                                 | Hydric criteria code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 517:<br>Benka, strongly sloping (45%)          | <br> <br> -  No            | <br> <br> <br> outwash plains                                 |                       |                                    | <br> <br>                       |                                |  |
| Benka, gently sloping (40%)                    | <br>-  No                  | outwash plains                                                |                       |                                    | <br>                            |                                |  |
| Qutal (8%)                                     | <br>-  No<br>              | <br> moraines on till plains,<br>  depressions on till plains | <br> <br>             |                                    | <br> <br>                       | <br> <br>                      |  |
| Tlikakila (7%)                                 | <br>-  No<br>              | <br> depressions on terraces,<br>  depressions on till plains | <br> <br>             | <br> <br>                          | <br> <br>!                      | <br> <br>                      |  |
| 518:<br>Boxcar (75%)                           | <br> <br>-  No             | <br> <br> kame moraines, lateral moraines                     | <br> <br>             |                                    | <br> <br>                       |                                |  |
| Tokositna (15%)                                | <br>-  No                  | till plains                                                   |                       |                                    |                                 |                                |  |
| Tuxedni (10%)                                  | <br>-  No                  | till plains                                                   |                       |                                    | <br>                            |                                |  |
| 519:<br>Boxcar (80%)                           | <br> <br>-  No             | <br> <br> kame moraines, lateral moraines                     | <br> <br>             |                                    | <br> <br>                       |                                |  |
| Tokositna (10%)                                | <br>-  No                  | <br> hills                                                    |                       |                                    |                                 |                                |  |
| Tuxedni (10%)                                  | <br>-  No                  | till plains, hills                                            |                       |                                    |                                 |                                |  |
| 520:<br>Boxcar (85%)                           | <br> <br>-  No             | <br> <br> lateral moraines, kame moraines                     | <br> <br>             | <br> <br>                          | <br> <br>                       |                                |  |
| Truuli (10%)                                   | <br>-  Yes<br>             | hills, depressions on terraces,   depressions on till plains  | <br>  2B3<br>         | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |
| Kachemak (5%)                                  | <br>-  No                  | <br> moraines on till plains                                  |                       |                                    | <br>                            | ļ                              |  |
| 521:<br>Boxcar, cool (80%)                     | <br> <br>-  No             | <br> <br> kame moraines, lateral moraines                     | <br> <br>             |                                    | <br> <br>                       |                                |  |
| Kachemak, cool (10%)                           | <br>-  No                  | <br> moraines on till plains                                  |                       |                                    | <br>                            |                                |  |
| Tuxedni (10%)                                  | <br>-  No                  | till plains                                                   |                       |                                    | <br>                            |                                |  |
| 522:<br>Boxcar, cool (80%)                     | <br> <br>-  No             | <br> <br> kame moraines, lateral moraines                     | <br> <br>             | <br> <br>                          | <br> <br>                       |                                |  |
| Kachemak, cool (10%)                           | <br>-  No                  | <br> moraines on till plains                                  |                       |                                    | <br>                            |                                |  |
| Snowdance (10%)                                | <br>-  Yes                 | till plains                                                   | <br>  2B3             | Yes                                | <br>  No                        | <br>  No                       |  |
| 523:<br>Chenega (85%)                          | <br> <br>-  No<br>         | <br> <br> flood plains, stream terraces,<br>  alluvial fans   | <br> <br>             | <br> <br>                          | <br> <br> <br>                  | <br> <br>                      |  |
| Riverwash (10%)                                | <br>- Unranked             | <br> flood plains                                             |                       |                                    | <br>                            |                                |  |
| Typic Cryaquents (5%)                          | <br>-  Yes                 | <br> estuaries, deltas                                        | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 524:<br>Chenega, cool (90%)                    | <br> <br>-  No<br>         | <br> <br> alluvial fans, flood plains,<br>  stream terraces   | <br> <br>             | <br> <br>                          | <br> <br> <br>                  | <br> <br> <br>                 |  |
| Riverwash (10%)                                | <br>-  Unranked            | <br> flood plains                                             |                       |                                    |                                 | <br>                           |  |

Table 23. Hydric Soils List—Continued

|                                                | ļ                          | <br>                                                             | +                    | lydric soils o                     | criteria                        |                                |
|------------------------------------------------|----------------------------|------------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | <br>  Local landform<br> <br>                                    | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 525:<br>Chenega, occasionally flooded (85%)    | <br> <br>  No<br>          | <br> <br> flood plains, stream terraces,<br>  alluvial fans      |                      |                                    | <br> <br> <br>                  |                                |
| Riverwash (10%)                                | <br> Unranked              | <br> flood plains                                                |                      |                                    |                                 |                                |
| Typic Cryaquents (5%)                          | <br>  Yes                  | <br> deltas, estuaries                                           | 2B3                  | Yes                                | No                              | No                             |
| 526:<br>Chulitna (90%)                         | <br> <br>  No<br>          | <br> <br>  moraines on till plains,<br>  terraces on till plains |                      |                                    |                                 |                                |
| Benka (6%)                                     | <br>  No                   | outwash plains                                                   | <br>                 | <br>                               | <br>                            |                                |
| Spenard (4%)                                   | <br>  Yes                  | <br> depressions on till plains                                  | 2B3                  | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 527:<br>Chulitna (80%)                         | <br> <br>  No<br>          | <br> <br> terraces on till plains,<br>  moraines on till plains  |                      |                                    |                                 |                                |
| Spenard (15%)                                  | <br>  Yes                  | depressions on till plains                                       | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Kashwitna (5%)                                 | <br>  No                   | outwash plains, kame moraines                                    |                      |                                    | <br>                            |                                |
| 528:<br>Chulitna (85%)                         | <br> <br>  No<br>          | <br> <br> terraces on till plains,<br>  moraines on till plains  |                      | <br> <br>                          | <br>                            | <br> <br>                      |
| Whitsol (10%)                                  | j<br>  No                  | <br> till plains, hills                                          | <br>                 | <br>                               | <br>                            | j<br>                          |
| Qutal (5%)                                     | <br>  No<br>               | <br> moraines on till plains,<br>  depressions on till plains    |                      | <br> <br>                          | <br> <br>                       | <br> <br>                      |
| 529:<br>Chulitna (85%)                         | <br> <br>  No<br>          | <br> <br> moraines on till plains, terraces<br>  on till plains  |                      | <br> <br>                          | <br> <br> <br>                  | <br> <br>                      |
| Whitsol (10%)                                  | <br>  No                   | <br> hills                                                       |                      | <br>                               | <br>                            |                                |
| Qutal (5%)                                     | <br>  No<br>               | <br> depressions on till plains,<br>  moraines on till plains    |                      |                                    | <br> <br>                       |                                |
| 530:<br>Chunilna (92%)                         | <br> <br>  Yes             | <br> till plains                                                 | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br>  No                       |
| Tuxedni (6%)                                   | <br>  No                   | <br> till plains                                                 |                      |                                    |                                 |                                |
| Doroshin (2%)                                  | <br>  Yes<br> <br>         | <br> fens on till plains,<br>  depressions on till plains<br>    | 1                    | Yes<br>                            | <br>  No<br> <br>               | <br>  No<br> <br>              |
| 531:<br>Chunilna (82%)                         | <br>  Yes                  | <br> till plains                                                 | <br>  2B3            | Yes                                | No                              | i<br>i No                      |
| Tuxedni (15%)                                  | l<br>  No                  | <br> till plains                                                 |                      |                                    | <br>                            |                                |
| Doroshin (3%)                                  | <br>  Yes<br>              | l<br> fens on till plains,<br>  depressions on till plains       | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | No                             |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                           |                      | lydric soils o                     | criteria                        |                                |
|------------------------------------------------|----------------------------|-----------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | <br>  Local landform<br> <br>                             | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 532:<br>Chunilna, cool (80%)                   | <br> <br>   Yes            | <br> <br> till plains                                     | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Tokositna (15%)                                | <br>  No                   | <br> till plains                                          |                      | <br>                               | <br>                            |                                |
| Doroshin (5%)                                  | <br>  Yes<br>              | <br> depressions on till plains,<br>  fens on till plains | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 533:<br>Chunilna, cool (85%)                   | <br> <br>  Yes             | <br> <br> till plains                                     | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Tokositna (10%)                                | No                         | l<br> hills, till plains                                  |                      |                                    |                                 |                                |
| Doroshin (5%)                                  | <br>  Yes<br>              | <br> depressions on till plains,<br>  fens on till plains | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 534:<br>Clam Gulch (85%)                       | <br> <br>  Yes             | <br> <br> depressions on till plains                      | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Doroshin (5%)                                  | Yes                        | <br> fens on till plains,<br>  depressions on till plains | 1                    | <br>  Yes<br>                      | No                              | No                             |
| Kenai (5%)                                     | No                         | <br> moraines on till plains                              |                      |                                    | ļ                               |                                |
| Slikok (4%)                                    | <br>  Yes<br>              | <br> flood plains, depressions on<br>  till plains        | <br>  2B3<br>        | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Water, fresh (1%)                              | Unranked                   | NO DATA                                                   |                      |                                    | ļ<br>!                          |                                |
| 535:<br>Clunie (90%)                           | <br> <br>  Yes             | <br> <br> tidal flats                                     | 1,3                  | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  Yes                 |
| Typic Cryaquents (8%)                          | Yes                        | <br> deltas, estuaries                                    | 2B3                  | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Starichkof (2%)                                | Yes                        | <br> fens                                                 | 1                    | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 536:<br>Coal Creek (75%)                       | <br>   Yes<br>             | <br>  depressions on stream terraces,<br>  till plains    | <br>  2B3<br>        | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br> <br>  No<br>              |
| Cohoe (10%)                                    | <br>  No                   | <br> moraines on till plains                              | <br>                 | <br>                               | <br>                            |                                |
| Naptowne (10%)                                 | <br>  No                   | <br> moraines                                             |                      |                                    |                                 |                                |
| Slikok (5%)                                    | <br>  Yes                  | <br> flood plains                                         | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 537:<br>Coal Creek (88%)                       | <br> <br>  Yes             | <br> <br> depressions on till plains                      | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Starichkof (10%)                               | Yes                        | <br> fens                                                 | 1                    | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Mutnala (2%)                                   | <br>  No<br>               | <br> moraines on till plains<br>                          |                      |                                    | <br>                            | <br>                           |

Table 23. Hydric Soils List—Continued

|                                                |                      |                                                                      | <br> <br>                      | Hydric soils o                     | criteria                        |                                |
|------------------------------------------------|----------------------|----------------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>  soil<br> | Local landform                                                       | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 538:<br>Coal Creek (88%)                       | <br> <br>  Yes       | <br> <br> depressions on till plains                                 | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Qutal (8%)                                     | No                   | <br> depressions on till plains,<br>  moraines on till plains        |                                |                                    |                                 |                                |
| Doroshin (4%)                                  | Yes<br>              | <br> depressions on till plains,<br>  fens on till plains            | 1                              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 539:<br>Cohoe (87%)                            | <br> <br>  No        | <br> <br> moraines on till plains                                    | <br> <br>                      | <br> <br>                          | <br> <br>                       | <br> <br>                      |
| Spenard (11%)                                  | <br>  Yes            | <br> depressions on till plains                                      | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Doroshin (2%)                                  | Yes                  | depressions on till plains,<br>fens on till plains                   | 1                              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 540:<br>Cohoe (85%)                            | No                   | <br> <br> moraines on till plains                                    |                                |                                    |                                 |                                |
| Spenard (13%)                                  | Yes                  | depressions on till plains                                           | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Doroshin (2%)                                  | Yes<br>              | <br> depressions on till plains,<br>  fens on till plains            | 1                              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 541:<br>Cohoe (89%)                            | <br> <br>  No        | <br> <br> moraines on till plains                                    |                                |                                    | <br> <br>                       | <br> <br>                      |
| Spenard (9%)                                   | <br>  Yes            | <br> moraines on till plains                                         | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Doroshin (2%)                                  | Yes<br>              | <br> depressions on till plains,<br>  fens on till plains            | 1                              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 542:<br>Cohoe (93%)                            | <br> <br>  No        | <br> <br> moraines on till plains                                    | <br> <br>                      | <br> <br>                          | <br> <br>                       | <br> <br>                      |
| Spenard (7%)                                   | <br>  Yes            | <br> moraines on till plains                                         | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 543:<br>Cohoe (80%)                            | <br> <br>  No        | <br> <br> moraines on till plains                                    | <br> <br>                      |                                    |                                 | <br> <br>                      |
| Kichatna (10%)                                 | <br>  No             | <br> terraces on outwash plains                                      |                                |                                    | <br>                            | <br>                           |
| Mutnala (10%)                                  | <br>  No             | <br> moraines on till plains                                         | <br>                           |                                    | <br>                            |                                |
| 544:<br>Cohoe (84%)                            | <br> <br>  No        | <br> <br> moraines on till plains                                    | <br> <br>                      |                                    | <br> <br>                       | <br> <br>                      |
| Kichatna (14%)                                 | <br>  No             | <br> terraces on outwash plains                                      |                                |                                    | <br>                            |                                |
| Truuli (2%)                                    | Yes<br>              | <br> depressions on till plains,<br>  depressions on terraces, hills | <br>  2B3<br>                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 545:<br>Cohoe, dry (87%)                       | <br>   No            | <br> <br> moraines on till plains                                    |                                |                                    |                                 |                                |
| Spenard (11%)                                  | Yes                  | depressions on till plains                                           | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Doroshin (2%)                                  | Yes<br>              | <br> depressions on till plains,<br>  fens on till plains            | 1 1                            | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |

Table 23. Hydric Soils List—Continued

|                                                | <br> <br>                  |                                                            | +                          | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|------------------------------------------------------------|----------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                             | Hydric<br>criteria<br>code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 546:<br>Cohoe, dry (85%)                       | <br> <br>  No              | <br> <br> moraines on till plains                          |                            |                                    | <br> <br>                       |                                |  |  |
| Spenard (13%)                                  | <br>  Yes                  | depressions on till plains                                 | <br>  2B3                  | <br>  Yes                          | l<br>  No                       | <br>  No                       |  |  |
| Doroshin (2%)                                  | <br>  Yes<br>              | depressions on till plains,<br>  fens on till plains       | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 547:<br>Cohoe, dry (89%)                       | <br> <br>  No              | <br> <br> moraines on till plains                          |                            |                                    | <br> <br>                       |                                |  |  |
| Spenard (9%)                                   | Yes                        | <br> moraines on till plains                               | 2B3                        | Yes                                | l No                            | No                             |  |  |
| Doroshin (2%)                                  | <br>  Yes<br>              | <br> fens on till plains,<br>  depressions on till plains  | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 548: Cohoe, dry (93%)                          | <br> <br>  No              | <br> moraines on till plains                               |                            |                                    | <br> <br>                       |                                |  |  |
| Spenard (7%)                                   | <br>  Yes                  | moraines on till plains                                    | 2B3                        | Yes                                | l No                            | No                             |  |  |
| 549:<br>Cohoe, dry (80%)                       | <br> <br>  No              | <br> <br> moraines on till plains                          |                            |                                    | <br> <br>                       |                                |  |  |
| Kichatna (10%)                                 | l<br>  No                  | terraces on outwash plains                                 |                            |                                    |                                 |                                |  |  |
| Naptowne (10%)                                 | l<br>  No                  | moraines                                                   |                            |                                    | <br>                            |                                |  |  |
| 550:<br>Cohoe, dry (84%)                       | <br> <br>  No              | moraines on till plains                                    |                            |                                    | <br> <br>                       |                                |  |  |
| Kichatna (14%)                                 | l<br>  No                  | terraces on outwash plains                                 |                            |                                    | ļ<br>                           |                                |  |  |
| Truuli (2%)                                    | <br>  Yes<br>              | depressions on terraces, hills, depressions on till plains | <br>  2B3<br>              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 551:<br>Cohoe, moderately steep (45%)          | <br> <br>  No              | <br> <br> moraines on till plains                          |                            | <br> <br>                          | <br> <br>                       |                                |  |  |
| Cohoe, gently sloping (40%)                    | No                         | moraines on till plains                                    |                            |                                    |                                 |                                |  |  |
| Qutal (8%)                                     | <br>  No<br>               | depressions on till plains,<br>  moraines on till plains   |                            |                                    | <br> <br>                       |                                |  |  |
| Slikok (7%)                                    | <br>  Yes                  | <br> flood plains                                          | 2B3                        | <br>  Yes                          | l<br>  No                       | <br>  No                       |  |  |
| 552: Cohoe, dry, moderately steep (45%)        | <br> <br>  No              | <br> moraines on till plains                               |                            |                                    | <br> <br>                       |                                |  |  |
| Cohoe, dry, gently sloping (40%)               | l<br>  No                  | <br> moraines on till plains                               |                            |                                    | ļ<br>                           |                                |  |  |
| Qutal (8%)                                     | <br>  No<br>               |                                                            |                            |                                    | <br> <br>                       |                                |  |  |
| Slikok (7%)                                    | <br>  Yes<br>              | <br> flood plains<br>                                      | <br>  2B3<br>              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                     | <br>                                                                | <br>                 | Hydric soils o                     | criteria                        |                                |
|------------------------------------------------|---------------------|---------------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>soil      | Local landform                                                      | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 553:<br>Cohoe, dry (55%)                       | <br> <br>-  No      | <br> <br> moraines on till plains                                   |                      |                                    | <br>                            |                                |
| Kenai (30%)                                    | <br>-  No           | <br> moraines on till plains                                        |                      |                                    |                                 |                                |
| Clam Gulch (5%)                                | <br>-  Yes          | <br> depressions on till plains                                     | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Qutal (5%)                                     | <br>-  No<br>       | <br> moraines on till plains,<br>  depressions on till plains       | <br>                 | <br> <br>                          | <br> <br>                       | <br> <br>                      |
| Soldotna (5%)                                  | <br>-  No<br>       | <br> moraines on till plains, outwash<br>  plains                   |                      |                                    | <br> <br>                       | <br> <br>                      |
| 554:<br>Cohoe, dry (55%)                       | <br> <br> -   No    | <br> <br> moraines on till plains                                   |                      |                                    |                                 |                                |
| Kenai (30%)                                    | - No                | moraines on till plains                                             |                      |                                    |                                 |                                |
| Clam Gulch (5%)                                | <br>-  Yes<br>      | <br> depressions on till plains<br>                                 | <br>  2B3<br>        | <br>  Yes<br>                      | <br>  No<br>                    | No                             |
| Qutal (5%)                                     | <br> -<br>  No<br>  | <br> depressions on till plains,<br>  moraines on till plains       |                      | <br>                               | i<br> <br>!                     |                                |
| Soldotna (5%)                                  | <br>-  No<br>       | <br> moraines on till plains, outwash<br>  plains                   |                      |                                    | <br> <br>                       |                                |
| 555:<br>Cohoe, dry (70%)                       | <br> <br>-  No      | <br> <br> moraines on till plains                                   |                      |                                    | <br> <br>                       |                                |
| Nikolai (30%)                                  | ·   Yes             | depressions on till plains,<br>  depressions on coastal plains      | 1                    | Yes                                | No                              | No                             |
| 556:<br>Cohoe, dry (70%)                       | <br> <br>-  No      | <br> <br> moraines on till plains                                   |                      |                                    |                                 |                                |
| Nikolai (30%)                                  | <br>-  Yes<br>      | <br> depressions on till plains,<br>  depressions on coastal plains | 1 1                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 557:<br>Cytex Creek (75%)                      | <br> <br>-  No      | <br> <br> moraines on till plains                                   |                      |                                    | <br> <br>                       | <br> <br>                      |
| Nikolaevsk (15%)                               | <br>-  Yes          | <br> moraines on till plains                                        | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Tokositna (10%)                                | <br>-  No           | <br> till plains                                                    |                      | <br>                               | <br>                            | <br>                           |
| 558:<br>Doroshin (83%)                         | <br> <br>-  Yes<br> | <br> depressions on till plains,<br>  fens on till plains           | 1                    | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br>  No<br>                   |
| Starichkof (8%)                                | ∣<br>·  Yes         | <br> fens                                                           | 1                    | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Slikok (7%)                                    | ∣<br>-  Yes         | <br> flood plains                                                   | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Water, fresh (2%)                              | <br>- Unranked<br>  | <br> NO DATA<br>                                                    |                      |                                    | <br>                            | <br> <br>                      |

Table 23. Hydric Soils List—Continued

|                                                |                                  | <br>                                                           |                                | Hydric soils criteria              |                                 |                                |  |
|------------------------------------------------|----------------------------------|----------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> <br>_ | <br>  Local landform<br> <br> -                                | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 559:<br>Doroshin (79%)                         | <br> <br>  Yes<br>               | <br> <br> depressions on till plains,<br>  fens on till plains | 1 1                            | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br> <br>  No<br>              |  |
| Starichkof (15%)                               | Yes                              | <br> fens                                                      | 1                              | <br>  Yes                          | No                              | No                             |  |
| Slikok (5%)                                    | Yes                              | <br> depressions on till plains,<br>  flood plains             | 2B3                            | Yes                                | No                              | No                             |  |
| Water, fresh (1%)                              | Unranked                         | I<br>INO DATA                                                  |                                |                                    |                                 |                                |  |
| 560:<br>Dystrocryepts (50%)                    | No                               | <br> <br> moraines on till plains, hills<br>                   |                                |                                    | <br> <br>                       |                                |  |
| Typic Cryorthents (30%)                        | No                               | moraines on till plains, hills                                 | j                              | j                                  | i                               | j                              |  |
| Iliamna, cool (20%)                            | No                               | hills                                                          | j                              | j                                  | i                               | j                              |  |
| 561: Foreland (79%)                            | Yes                              | <br> stream terraces                                           | <br>  2B3                      | Yes                                | <br>  No                        | <br>  No                       |  |
| Truuli (14%)                                   | Yes                              | depressions on terraces,<br>  depressions on till plains       | 2B3                            | Yes                                | No                              | No                             |  |
| Doroshin (6%)                                  | Yes<br>                          | <br> fens on till plains,<br>  depressions on till plains      | <br>  1<br>                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |
| Water, fresh (1%)                              | Unranked                         | INO DATA                                                       |                                |                                    |                                 |                                |  |
| 562:<br>Foreland (59%)                         | Yes                              | <br> <br> outwash plains                                       | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Soldotna (20%)                                 | No                               | <br> moraines on till plains, outwash<br>  plains              |                                |                                    | <br> <br>                       | <br> <br>                      |  |
| Starichkof (20%)                               | Yes                              | <br> fens                                                      | 1                              | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Water, fresh (1%)                              | Unranked                         | I<br>INO DATA                                                  |                                |                                    |                                 |                                |  |
| 563:<br>Pits, gravel (95%)                     | <br> <br> Unranked               | <br> <br> outwash plains                                       |                                |                                    | <br> <br>                       |                                |  |
| Water, fresh (5%)                              | Unranked                         | INO DATA                                                       |                                |                                    |                                 |                                |  |
| 564:<br>Iliamna (80%)                          | No                               | <br> <br> plains                                               |                                |                                    | <br> <br>                       |                                |  |
| Benka (14%)                                    | No                               | l<br> outwash plains                                           |                                |                                    |                                 |                                |  |
| Tlikakila (6%)                                 | No<br>                           | <br> depressions on terraces,<br>  depressions on till plains  |                                |                                    | <br> <br>                       |                                |  |
| 565:<br>Iliamna (82%)                          | No                               | <br> <br> hills                                                |                                |                                    | <br> <br>                       |                                |  |
| Cohoe (14%)                                    | No                               | <br> moraines on till plains                                   |                                |                                    |                                 |                                |  |
| Spenard (4%)                                   | Yes                              | <br> moraines on till plains                                   | 2B3                            | Yes                                | <br>  No                        | No                             |  |

Table 23. Hydric Soils List—Continued

|                                                | <br>                 |                                                                | <br>  F              | lydric soils o                     | criteria                        |                                |
|------------------------------------------------|----------------------|----------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>  soil<br> | Local landform                                                 | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 566:<br>Iliamna (80%)                          | <br> <br>  No        | <br> <br> hills                                                | <br> <br>            |                                    | <br> <br>                       | <br> <br>                      |
| Tlikakila (14%)                                | <br>  No<br>         | depressions on till plains,<br>  depressions on terraces       |                      |                                    | <br> <br>                       | <br> <br>                      |
| Cohoe (6%)                                     | <br>  No             | <br> moraines on till plains                                   |                      |                                    | <br>                            |                                |
| 567:<br>Iliamna, cool (90%)                    | <br> <br>  No        | <br> hills                                                     |                      |                                    | <br>                            |                                |
| Snowdance (10%)                                | <br>  Yes            | l<br> till plains<br>                                          | 2B3                  | Yes                                | <br>  No                        | No                             |
| 568:<br>Island (90%)                           | <br> <br>  No        | till plains                                                    |                      |                                    |                                 |                                |
| Tuxedni (8%)                                   | <br>  No             | till plains                                                    |                      |                                    |                                 |                                |
| Nikolai (2%)                                   | <br>  Yes<br>        | depressions on till plains,<br>  depressions on coastal plains | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | No                             |
| 569:<br>Island (91%)                           | <br> <br>  No        | <br> <br> till plains                                          |                      |                                    | <br> <br>                       |                                |
| Tuxedni (8%)                                   | <br>  No             | <br> till plains                                               |                      |                                    |                                 |                                |
| Doroshin (1%)                                  | <br>  Yes<br>        | <br> depressions on till plains,<br>  fens on till plains      | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 570:<br>Island (90%)                           | <br> <br>  No        | <br> <br> hillslopes on till plains                            |                      |                                    | <br> <br>                       |                                |
| Tuxedni (10%)                                  | <br>  No             | <br> hills, till plains                                        |                      |                                    |                                 |                                |
| 571:<br>Island (92%)                           | <br> <br>  No        | hillslopes on till plains                                      |                      |                                    | <br>                            |                                |
| Tuxedni (8%)                                   | l<br>  No            | hills, till plains                                             |                      |                                    |                                 |                                |
| 572: Island, forested (90%)                    | <br> <br>  No        | till plains                                                    |                      |                                    |                                 |                                |
| Tuxedni (8%)                                   | <br>  No             | till plains                                                    |                      |                                    |                                 |                                |
| Benka (2%)                                     | <br>  No             | l<br> outwash plains                                           |                      |                                    |                                 |                                |
| 573:<br>Kachemak (80%)                         | <br> <br>  No        | <br> <br> moraines on till plains                              |                      |                                    | <br>                            |                                |
| Redoubt (10%)                                  | l<br>  No            | hills                                                          |                      |                                    |                                 |                                |
| Tuxedni (10%)                                  | <br>  No<br>         | till plains                                                    |                      |                                    | <br> <br>                       |                                |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                   | į i                            | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|-----------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                    | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 574:<br>Kachemak (80%)                         | <br> <br> <br>  No         | <br> <br> moraines on till plains |                                |                                    | <br> <br> <br>                  |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | <br>  No                   | <br> till plains, hills           |                                |                                    |                                 |                                |  |  |
| Starichkof (2%)                                | <br>  Yes                  | fens                              | 1                              | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 575:<br>Kachemak (80%)                         | <br> <br>  No              | <br> <br> moraines on till plains |                                |                                    | <br> <br>                       |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | <br>  No                   | <br> till plains                  |                                |                                    |                                 |                                |  |  |
| 576:<br>Kachemak (80%)                         | <br> <br>  No              | <br> <br> moraines on till plains |                                |                                    | <br> <br>                       |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | <br>  No                   | <br> hills, till plains           |                                |                                    |                                 |                                |  |  |
| 577:<br>Kachemak (80%)                         | <br> <br>  No              | <br> <br> moraines on till plains |                                |                                    | <br> <br>                       |                                |  |  |
| Tuxedni (10%)                                  | <br>  No                   | hills, till plains                |                                |                                    |                                 |                                |  |  |
| 578:<br>Kachemak, cool (80%)                   | <br> <br>  No              | <br> <br> moraines on till plains |                                |                                    | <br> <br>                       |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | <br>  No                   | <br> till plains                  |                                |                                    |                                 |                                |  |  |
| Starichkof (2%)                                | <br>  Yes                  | <br> fens                         | 1                              | <br>  Yes                          | <br>  No                        | No                             |  |  |
| 579:<br>Kachemak, cool (80%)                   | <br> <br>  No              | <br> <br> moraines on till plains |                                | -                                  | <br>                            |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | <br>  No                   | <br> till plains                  |                                |                                    |                                 |                                |  |  |
| Starichkof (2%)                                | <br>  Yes                  | <br> fens                         | 1                              | <br>  Yes                          | l No                            | No                             |  |  |
| 580:<br>Kachemak, cool (80%)                   | <br> <br>  No              | <br> <br> moraines on till plains |                                | -                                  | <br>                            |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | <br>  No                   | <br> till plains                  |                                |                                    |                                 |                                |  |  |
| 581:<br>Kachemak, cool (80%)                   | <br>  No                   | <br> <br> moraines on till plains |                                |                                    |                                 |                                |  |  |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | l<br>  No                  | <br> hills, till plains           |                                |                                    |                                 |                                |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                                  |                                                           |                                | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------------|-----------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> <br>_ | Local landform                                            | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 582:<br>Kachemak, cool (80%)                   | <br> <br>  No                    | <br> <br> moraines on till plains                         |                                |                                    | <br>                            |                                |  |  |
| Redoubt (10%)                                  | No                               | <br> hills                                                |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | No                               | <br> till plains, hills                                   |                                |                                    | <br>                            |                                |  |  |
| 583:<br>Kachemak, forested (75%)               | No                               | <br> <br> moraines on till plains                         |                                |                                    |                                 |                                |  |  |
| Redoubt (10%)                                  | No                               | <br> hills                                                |                                |                                    | <br>                            |                                |  |  |
| Tuxedni (10%)                                  | No                               | <br> till plains                                          |                                |                                    |                                 |                                |  |  |
| Starichkof (5%)                                | Yes                              | <br> fens                                                 | 1                              | Yes                                | No                              | No                             |  |  |
| 584:<br>Kachemak, forested (85%)               | No                               | <br> <br> moraines on till plains                         |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | No                               | <br> till plains                                          |                                |                                    |                                 |                                |  |  |
| Redoubt (5%)                                   | No                               | <br> hills                                                |                                |                                    |                                 |                                |  |  |
| Starichkof (2%)                                | Yes                              | <br> fens                                                 | 1                              | Yes                                | <br>  No                        | No                             |  |  |
| 585:<br>Kachemak, forested (80%)               | No                               | <br> <br> moraines on till plains                         |                                |                                    | ļ<br>                           |                                |  |  |
| Redoubt (10%)                                  | No                               | <br> hills                                                |                                |                                    |                                 |                                |  |  |
| Tuxedni (10%)                                  | No                               | till plains                                               |                                |                                    | <br>                            |                                |  |  |
| 586:<br>Kachemak, cool (60%)                   | <br>  No                         | <br> <br> moraines on till plains                         |                                |                                    |                                 |                                |  |  |
| Snowdance (40%)                                | Yes                              | <br> till plains                                          | 2B3                            | Yes                                | <br>  No                        | No                             |  |  |
| 587:<br>Kachemak, cool (65%)                   | <br>  No                         | <br> <br> moraines on till plains                         |                                |                                    | ļ<br>ļ                          |                                |  |  |
| Snowdance (35%)                                | Yes                              | <br> till plains                                          | 2B3                            | Yes                                | No                              | l No                           |  |  |
| 588:<br>Kachemak, cool (70%)                   | No                               | <br> <br> moraines on till plains                         |                                |                                    | <br>                            |                                |  |  |
| Snowdance (30%)                                | Yes                              | <br> till plains                                          | 2B3                            | Yes                                | No                              | No                             |  |  |
| 589:<br>Kalifonsky (83%)                       | <br>   Yes                       | <br> <br> depressions on till plains                      | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Cohoe, dry (10%)                               | No                               | <br> moraines on till plains                              |                                |                                    | <br>                            |                                |  |  |
| Doroshin (7%)                                  | <br>  Yes<br>                    | <br> depressions on till plains,<br>  fens on till plains | <br>  1<br>                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| 590:<br>Kalifonsky (85%)                       | <br> <br>  Yes                   | <br> <br> depressions on till plains<br>                  | <br> <br>  2B3                 | <br> <br>  Yes                     | <br> <br>  No<br>               | <br> <br>  No                  |  |  |
| Spenard (15%)                                  | Yes                              | depressions on till plains                                | 2B3                            | Yes                                | No                              | No                             |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                |                                                                | 1                    | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------|----------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | Hydric<br>soil | Local landform                                                 | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 591:<br>Kalifonsky (50%)                       | Yes            | <br> <br> depressions on till plains                           | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Typic Cryorthents (30%)                        | No             | terraces on outwash plains                                     |                      |                                    | <br>                            |                                |  |  |
| Kichatna (10%)                                 | No             | terraces on outwash plains                                     |                      |                                    | <br>                            |                                |  |  |
| Spenard (10%)                                  | Yes            | <br> moraines on till plains                                   | <br>  2B3            | <br>  Yes                          | <br>  No                        | l No                           |  |  |
| 592:<br>Karluk (80%)                           | Yes            | <br> <br> bogs on stream terraces                              | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Nikolai (10%)                                  | Yes            | depressions on coastal plains,<br>  depressions on till plains | 1                    | Yes                                | No                              | No                             |  |  |
| Soldotna (10%)                                 | No             | outwash plains, moraines on till plains                        |                      | <br> <br>                          | <br>                            | <br> <br>                      |  |  |
| 593:<br>Kashwitna (85%)                        | No             | <br> <br> kame moraines, outwash plains                        |                      |                                    |                                 |                                |  |  |
| Kalifonsky (10%)                               | Yes            | depressions on till plains                                     | 2B3                  | Yes                                | No                              | No                             |  |  |
| Iliamna (5%)                                   | No             | <br> plains<br>                                                |                      |                                    |                                 |                                |  |  |
| 594:<br>Kashwitna (88%)                        | No             | outwash plains, kame moraines                                  |                      |                                    |                                 |                                |  |  |
| Kalifonsky (6%)                                | Yes            | <br> depressions on till plains                                | 2B3                  | Yes                                | l No                            | No                             |  |  |
| Qutal (6%)                                     | No             | moraines on till plains,<br>depressions on till plains         |                      |                                    |                                 |                                |  |  |
| 595:<br>Kashwitna (85%)                        | No             | kame moraines, outwash plains                                  |                      |                                    |                                 |                                |  |  |
| Tlikakila (10%)                                | No             | depressions on terraces,<br> depressions on till plains        |                      |                                    | <br> <br>                       |                                |  |  |
| Redoubt (5%)                                   | No             | <br> hills                                                     |                      |                                    |                                 |                                |  |  |
| 596:<br>Kashwitna, moderately steep (50%)      | No             | <br> <br> kame moraines, outwash plains                        |                      | -                                  |                                 |                                |  |  |
| Kashwitna, strongly sloping (40%)              | No             | outwash plains, kame moraines                                  |                      |                                    |                                 |                                |  |  |
| Spenard (10%)                                  | Yes            | <br> moraines on till plains                                   | 2B3                  | Yes                                | No                              | No                             |  |  |
| 597:<br>Kenai (81%)                            | No             | <br> <br> moraines on till plains                              |                      |                                    |                                 |                                |  |  |
| Cohoe, dry (10%)                               | No             | <br> moraines on till plains                                   |                      |                                    |                                 |                                |  |  |
| Clam Gulch (9%)                                | Yes            | depressions on till plains                                     | 2B3                  | <br>  Yes                          | <br>  No                        | No                             |  |  |

Table 23. Hydric Soils List—Continued

|                                                | į                    |                                                                     | į +                            | Hydric soils o                     | riteria                         |                                |
|------------------------------------------------|----------------------|---------------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>  soil<br> | Local landform                                                      | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 598:<br>Kenai (82%)                            | <br>   No            | <br> <br> moraines on till plains                                   |                                |                                    | <br> <br>                       |                                |
| Clam Gulch (9%)                                | Yes                  | depressions on till plains                                          | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Redoubt (9%)                                   | No                   | <br> hills                                                          |                                |                                    |                                 |                                |
| 599:<br>Kenai (85%)                            | No                   | <br> <br> moraines on till plains                                   |                                |                                    | <br> <br>                       |                                |
| Clam Gulch (9%)                                | Yes                  | <br> depressions on till plains                                     | 2B3                            | <br>  Yes                          | No                              | No                             |
| Soldotna (6%)                                  | No                   | <br> moraines on till plains, outwash<br>  plains                   |                                |                                    | <br> <br>                       |                                |
| 600:<br>Kenai (88%)                            | No                   | <br> <br> moraines on till plains                                   |                                |                                    | <br> <br>                       |                                |
| Soldotna (10%)                                 | No<br>               | <br> moraines on till plains, outwash<br>  plains                   |                                |                                    | <br> <br>                       |                                |
| Clam Gulch (2%)                                | Yes                  | depressions on till plains                                          | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 601:<br>Kenai (86%)                            | No                   | <br> <br> moraines on till plains                                   |                                |                                    | <br> <br>                       |                                |
| Clam Gulch (9%)                                | Yes                  | <br> depressions on till plains                                     | 2B3                            | <br>  Yes                          | <br>  No                        | No                             |
| Redoubt (5%)                                   | No                   | <br> hills                                                          |                                |                                    |                                 |                                |
| 602:<br>Kenai, moderately steep (45%)          | No                   | <br> <br> moraines on till plains                                   |                                |                                    | <br>                            |                                |
| Kenai, gently sloping (40%)                    | No                   | <br> moraines on till plains                                        |                                |                                    |                                 |                                |
| Clam Gulch (9%)                                | Yes                  | <br> depressions on till plains                                     | 2B3                            | Yes                                | No                              | No                             |
| Redoubt (6%)                                   | No                   | <br> hills                                                          |                                |                                    |                                 |                                |
| 603:<br>Kenai (60%)                            | No                   | <br> <br> moraines on till plains                                   |                                |                                    | <br>                            |                                |
| Starichkof (31%)                               | Yes                  | <br> fens                                                           | 1                              | Yes                                | <br>  No                        | <br>  No                       |
| Clam Gulch (9%)                                | Yes                  | <br> depressions on till plains                                     | 2B3                            | Yes                                | No                              | <br>  No                       |
| 604:<br>Kichatna (70%)                         | No                   | <br>                                                                |                                |                                    | <br>                            |                                |
| Soldotna (15%)                                 | No<br>               | <br> moraines on till plains, outwash<br>  plains                   |                                |                                    | <br> <br>                       | <br>                           |
| Tangerra (10%)                                 | Yes<br>              | depressions on outwash plains,<br>  depressions on moraines         | <br>  2B3<br>                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Longmare (3%)                                  | No                   | <br> moraines, outwash plains                                       |                                |                                    | <br>                            |                                |
| Nikolai (2%)                                   | <br>  Yes<br>        | <br> depressions on till plains,<br>  depressions on coastal plains | <br>  1<br>                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |

Table 23. Hydric Soils List—Continued

|                                                |                      |                                                               | <br>                 | Hydric soils o                     | criteria                        |                                |
|------------------------------------------------|----------------------|---------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>  soil<br> | Local landform                                                | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 605:<br>Kichatna (75%)                         | <br> <br>  No        | <br> <br> hills on outwash plains                             |                      | <br> <br>                          | <br> <br>                       |                                |
| Soldotna (15%)                                 | <br>  No<br>         | <br> moraines on till plains, outwash<br>  plains             |                      |                                    | <br> <br>                       | <br> <br>                      |
| Coal Creek (5%)                                | -  Yes               | <br> depressions on till plains                               | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Starichkof (5%)                                | -  Yes               | <br> fens                                                     | 1                    | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 606:<br>Kichatna (75%)                         | <br>  No             | <br> <br> hills on outwash plains                             |                      |                                    |                                 |                                |
| Soldotna (20%)                                 | <br>  No<br>         | <br> outwash plains, moraines on till<br>  plains             |                      |                                    |                                 | <br> <br>                      |
| Karluk (3%)                                    | -  Yes               | <br> bogs on stream terraces                                  | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Doroshin (2%)                                  | <br>  Yes<br>        | <br> depressions on till plains,<br>  fens on till plains     | 1 1                  | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 607:<br>Kichatna (85%)                         | <br> <br>  No        | <br> <br> hills on outwash plains                             |                      | <br> <br>                          | <br> <br>                       |                                |
| Kalifonsky (5%)                                | -  Yes               | <br> depressions on till plains                               | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Soldotna (5%)                                  | <br>  No<br>         | <br> outwash plains, moraines on till<br>  plains             |                      |                                    | <br> <br>                       | <br> <br>                      |
| Tlikakila (5%)                                 | <br>  No<br>         | <br> depressions on till plains,<br>  depressions on terraces | <br> <br>            |                                    | <br> <br>                       | <br> <br>                      |
| 608:<br>Kichatna (70%)                         | <br> <br>   No       | <br> <br> hills on outwash plains                             |                      |                                    | <br> <br>                       |                                |
| Benka (15%)                                    | - No                 | <br> moraines<br>                                             |                      |                                    |                                 |                                |
| Qutal (5%)                                     | No                   | moraines on till plains,<br>  depressions on till plains      |                      |                                    |                                 |                                |
| Redoubt (5%)                                   | -  No                | l<br> hills                                                   |                      |                                    |                                 |                                |
| Spenard (5%)                                   | -  Yes               | <br> moraines on till plains                                  | <br>  2B3            | Yes                                | <br>  No                        | l No                           |
| 609:<br>Kichatna (50%)                         | <br>   No            | <br> <br> terraces on outwash plains                          |                      |                                    |                                 |                                |
| Killey (50%)                                   | -  Yes               | <br> flood plains                                             | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 610:<br>Kidazqeni (85%)                        | <br> -<br>  No       | <br> <br> stream terraces                                     |                      |                                    |                                 |                                |
| Riverwash (10%)                                | - Unranked           | l<br> flood plains                                            |                      |                                    |                                 |                                |
| Susitna (5%)                                   | <br>  No<br>         | <br> stream terraces<br>                                      |                      |                                    | <br> <br>                       | <br> <br>                      |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                                  | Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|----------------------------|------------------------------------------------------------------|-----------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform<br>                                               | Hydric criteria code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 611:<br>Killey (45%)                           | Yes                        | <br> <br> flood plains                                           | <br> <br>  2B3        | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Moose River (45%)                              | Yes                        | <br> flood plains                                                | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Chunilna (4%)                                  | Yes                        | till plains                                                      | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Slikok (3%)                                    | Yes                        | <br> flood plains                                                | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Doroshin (2%)                                  | <br>  Yes                  | <br> depressions on alluvial flats                               | 1                     | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Water, fresh (1%)                              | <br> Unranked              | NO DATA                                                          |                       | <br>                               | <br>                            | <br>                           |  |
| 612:<br>Liten (85%)                            | No                         | <br> <br> dunes                                                  |                       |                                    | <br> <br>                       |                                |  |
| Slikok (10%)                                   | Yes                        | <br> flood plains                                                | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Cohoe, dry (5%)                                | No                         | <br> moraines on till plains                                     |                       |                                    | <br>                            | ļ                              |  |
| 613:<br>Lithic Haplocryands (55%)              | <br> <br>  No              | <br> <br> mountains                                              |                       |                                    | <br> <br>                       | <br> <br>                      |  |
| Alic Haplocryands (20%)                        | No                         | mountains                                                        |                       |                                    | <br>                            |                                |  |
| Rock outcrop (17%)                             | Unranked                   | <br> mountains, hills                                            |                       |                                    | <br>                            | ļ                              |  |
| Typic Cryaquands (8%)                          | Yes                        | <br> mountains                                                   | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 614:<br>Lithic Haplocryands (55%)              | No                         | <br> <br> mountains                                              |                       |                                    |                                 |                                |  |
| Alic Haplocryands (20%)                        | No                         | <br> mountains                                                   |                       |                                    | ļ<br>                           |                                |  |
| Rock outcrop (20%)                             | Unranked                   | <br> mountains, hills                                            |                       |                                    | <br>                            |                                |  |
| Typic Cryaquands (5%)                          | Yes                        | <br> mountains                                                   | 2B3                   | Yes                                | No                              | l No                           |  |
| 615:<br>Longmare (80%)                         | No                         | <br> <br> outwash plains, moraines                               |                       |                                    |                                 |                                |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                                     |                       |                                    |                                 |                                |  |
| Kalifonsky (5%)                                | Yes                        | depressions on till plains                                       | 2B3                   | Yes                                | No                              | l<br>l No                      |  |
| Tangerra (5%)                                  | Yes<br>                    | <br> depressions on moraines,<br>  depressions on outwash plains | <br>  2B3<br>         | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |
| 616:<br>Longmare (80%)                         | No                         | <br> <br> outwash plains, moraines                               |                       |                                    |                                 |                                |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                                     |                       |                                    |                                 |                                |  |
| Kalifonsky (5%)                                | Yes                        | <br> depressions on till plains                                  | <br>  2B3             | <br>  Yes                          | <br>  No                        | l<br>l No                      |  |
| Tangerra (5%)                                  | Yes<br>                    | <br> depressions on moraines,<br>  depressions on outwash plains | <br>  2B3<br>         | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                               | Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|----------------------------|---------------------------------------------------------------|-----------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                                | Hydric criteria code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 617:<br>Mutnala (75%)                          | No                         | <br> <br> moraines on till plains                             |                       | <br> <br>                          | <br> <br>                       |                                |  |
| Qutal (10%)                                    | No<br>                     | <br> moraines on till plains,<br>  depressions on till plains |                       |                                    | <br> <br>                       | <br>                           |  |
| Redoubt (10%)                                  | No                         | hills                                                         |                       |                                    |                                 |                                |  |
| Spenard (5%)                                   | Yes                        | <br> depressions on till plains                               | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 618:<br>Mutnala (80%)                          | No                         | <br> <br> moraines on till plains                             |                       |                                    | <br> <br>                       |                                |  |
| Spenard (10%)                                  | Yes                        | depressions on till plains                                    | 2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Qutal (5%)                                     | No                         | <br> moraines on till plains,<br>  depressions on till plains |                       |                                    | <br> <br>                       |                                |  |
| Redoubt (5%)                                   | No                         | <br> hills                                                    |                       |                                    |                                 |                                |  |
| 619:<br>Mutnala (85%)                          | No                         | <br> <br> moraines on till plains                             |                       |                                    | <br> <br>                       |                                |  |
| Spenard (10%)                                  | Yes                        | <br> moraines on till plains                                  | 2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Qutal (5%)                                     | No<br>                     | <br> depressions on till plains,<br>  moraines on till plains |                       |                                    | <br> <br>                       |                                |  |
| 620:<br>Mutnala (85%)                          | No                         | <br> <br> moraines on till plains                             |                       |                                    | <br> <br>                       | <br> <br>                      |  |
| Spenard (10%)                                  | Yes                        | <br> moraines on till plains                                  | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Qutal (5%)                                     | No                         | <br> moraines on till plains,<br>  depressions on till plains |                       |                                    | <br> <br>                       |                                |  |
| 621:<br>Mutnala (85%)                          | No                         | <br> <br> moraines on till plains                             |                       |                                    | <br> <br>                       |                                |  |
| Kichatna (5%)                                  | No                         | terraces on outwash plains                                    |                       |                                    |                                 |                                |  |
| Qutal (5%)                                     | No                         | <br> depressions on till plains,<br>  moraines on till plains |                       |                                    | <br> <br>                       |                                |  |
| Spenard (5%)                                   | <br>  Yes<br>              | <br> moraines on till plains<br>                              | <br>  2B3             | <br>  Yes                          | <br>  No<br>                    | <br>  No                       |  |
| 622:<br>Mutnala (85%)                          | No                         | <br> moraines on till plains                                  |                       | <u> </u>                           | <br>                            | ļ<br>                          |  |
| Kichatna (5%)                                  | No                         | terraces on outwash plains                                    |                       |                                    |                                 |                                |  |
| Qutal (5%)                                     | No                         | moraines on till plains,<br>depressions on till plains        |                       |                                    | <br> <br>                       |                                |  |
| Spenard (5%)                                   | Yes                        | <br> moraines on till plains                                  | <br>  2B3             | <br>  Yes                          | <br>  No                        | <br>  No                       |  |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                          |                                | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|----------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                           | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 623:<br>Mutnala (45%)                          | <br> <br>  No              | <br> <br> moraines on till plains                        |                                |                                    | <br> <br>                       |                                |  |  |
| Starichkof (35%)                               | Yes                        | <br> fens                                                | 1                              | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| Slikok (20%)                                   | Yes                        | depressions on till plains                               | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 624:<br>Naptowne (80%)                         | No                         | <br> <br> moraines, till plains                          |                                |                                    |                                 |                                |  |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                             |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | No                         | <br> till plains                                         |                                |                                    |                                 |                                |  |  |
| Nikolai (2%)                                   | Yes                        | depressions on till plains                               | 1                              | <br>  Yes                          | <br>  No                        | No                             |  |  |
| 625:<br>Naptowne (80%)                         | No                         | <br> moraines, till plains                               |                                |                                    | <br>                            |                                |  |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                             |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | No                         | <br> till plains                                         |                                |                                    | <br>                            |                                |  |  |
| Nikolai (2%)                                   | Yes                        | depressions on till plains                               | 1                              | <br>  Yes                          | <br>  No                        | No                             |  |  |
| 626:<br>Naptowne (80%)                         | No                         | <br> <br> moraines                                       |                                |                                    |                                 |                                |  |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                             |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | No                         | <br> till plains                                         |                                |                                    |                                 |                                |  |  |
| Nikolai (2%)                                   | Yes                        | <br> depressions on till plains                          | 1                              | Yes                                | No                              | No                             |  |  |
| 627:<br>Naptowne (80%)                         | No                         | moraines                                                 |                                |                                    |                                 |                                |  |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                             |                                |                                    |                                 |                                |  |  |
| Tuxedni (8%)                                   | No                         | <br> till plains                                         |                                |                                    |                                 |                                |  |  |
| Nikolai (2%)                                   | Yes                        | depressions on till plains                               | 1                              | Yes                                | <br>  No                        | No                             |  |  |
| 628:<br>Naptowne (80%)                         | No                         | moraines                                                 |                                |                                    |                                 |                                |  |  |
| Soldotna (10%)                                 | No                         | <br> moraines on till plains                             |                                |                                    |                                 |                                |  |  |
| Tuxedni (6%)                                   | No                         | <br> till plains                                         |                                |                                    | <br>                            |                                |  |  |
| Nikolai (4%)                                   | Yes                        | depressions on moraines,<br>  depressions on till plains | 1                              | <br>  Yes<br>                      | <br>  No<br>                    | No                             |  |  |

Table 23. Hydric Soils List—Continued

|                                                | <br>                       |                                                          | <br>                 | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|----------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                           | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 629:<br>Naptowne (80%)                         | <br> <br> <br>  No         | <br>                                                     |                      |                                    |                                 |                                |  |  |
| Soldotna (10%)                                 | <br>  No                   | <br> moraines on till plains                             | j<br>                | j<br>                              | j<br>                           | j<br>                          |  |  |
| Tuxedni (6%)                                   | İ                          | till plains                                              | j<br>                | j<br>                              | j<br>                           | j<br>                          |  |  |
| Nikolai (4%)                                   | 1                          | <br> depressions on till plains                          | j<br>  1             | i<br>  Yes                         | <br>  No                        | j<br>  No                      |  |  |
| 630:<br>Naptowne, moderately steep (45%)       | <br>                       | <br> <br> moraines                                       |                      | <br> <br>                          | <br> <br>                       | <br> <br>                      |  |  |
| Naptowne, strongly sloping (40%)               | l<br>  No                  | moraines                                                 |                      |                                    | <br>                            |                                |  |  |
| Soldotna (7%)                                  | l<br>  No                  | moraines on till plains                                  | <br>                 |                                    | <br>                            |                                |  |  |
| Nikolai (4%)                                   | <br>  Yes<br>              | depressions on moraines,<br>  depressions on till plains | 1                    | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| Tuxedni (4%)                                   | l<br>  No                  | <br> till plains                                         |                      |                                    |                                 |                                |  |  |
| 631:<br>Naptowne, strongly sloping (45%)       | <br> <br>  No              | <br> <br> moraines                                       |                      |                                    |                                 |                                |  |  |
| Naptowne, gently sloping (40%)                 | <br>  No                   | moraines                                                 |                      |                                    | <br>                            |                                |  |  |
| Soldotna (7%)                                  | l<br>  No                  | moraines on till plains                                  |                      |                                    | <br>                            |                                |  |  |
| Nikolai (4%)                                   | <br>  Yes                  | depressions on till plains                               | 1                    | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| Tuxedni (4%)                                   | l<br>l No                  | till plains                                              |                      |                                    | <br>                            |                                |  |  |
| 632:<br>Niklason (85%)                         | <br> <br>  No              | <br> <br> flood plains                                   |                      |                                    | <br> <br>                       |                                |  |  |
| Kidazqeni (15%)                                | l<br>  No                  | <br> stream terraces                                     |                      |                                    |                                 |                                |  |  |
| 633:<br>Nikolaevsk (85%)                       | <br> <br>  Yes             | <br> <br> moraines on till plains                        | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br>  No                       |  |  |
| Tokositna (13%)                                | <br>  No                   | till plains                                              |                      |                                    |                                 |                                |  |  |
| Doroshin (2%)                                  | <br>  Yes<br>              | depressions on till plains,<br>  fens on till plains     | 1                    | Yes                                | <br>  No<br>                    | No                             |  |  |
| 634:<br>Nikolaevsk (83%)                       | <br> <br>  Yes             | <br> <br> moraines on till plains                        | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Tokositna (15%)                                | <br>  No                   | <br> till plains                                         |                      |                                    |                                 |                                |  |  |
| Doroshin (2%)                                  | <br>  Yes<br>              | depressions on till plains,<br>  fens on till plains     | 1                    | Yes                                | <br>  No<br>                    | <br>  No<br>                   |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                |                                                                     | <br>  Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|----------------|---------------------------------------------------------------------|-----------------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | Hydric<br>soil | Local landform                                                      | Hydric   criteria   code    | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 635:<br>Nikolaevsk (85%)                       | Yes            | <br> <br> moraines on till plains                                   | <br> <br>  2B3              | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Tokositna (14%)                                | No             | <br> till plains, hills                                             |                             |                                    | <br>                            |                                |  |
| Doroshin (1%)                                  | Yes            | depressions on till plains,<br>  fens on till plains                | 1 1                         | Yes                                | <br>  No<br>                    | <br>  No<br>                   |  |
| 636:<br>Nikolai (90%)                          | Yes            | <br> depressions on coastal plains,<br>  depressions on till plains | 1                           | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br> <br>  No<br>              |  |
| Starichkof (5%)                                | Yes            | <br> fens                                                           | 1                           | Yes                                | No                              | No                             |  |
| Truuli (5%)                                    | Yes            | depressions on till plains,<br> depressions on terraces             | <br>  2B3<br>               | Yes                                | <br>  No<br>                    | <br>  No<br>                   |  |
| 637:<br>Nikolai, somewhat poorly drained (60%) | Yes            | <br> depressions on coastal plains,<br> depressions on till plains  | 1                           | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br> <br>  No<br>              |  |
| Tuxedni (25%)                                  | No             | <br> till plains                                                    |                             |                                    |                                 |                                |  |
| Cohoe, dry (8%)                                | No             | <br> moraines on till plains                                        |                             |                                    |                                 |                                |  |
| Soldotna (7%)                                  | No             | outwash plains, moraines on till plains                             |                             |                                    | <br>                            |                                |  |
| 638:<br>Puntilla (80%)                         | No             | <br> <br> moraines on till plains                                   |                             |                                    |                                 |                                |  |
| Kachemak (15%)                                 | No             | <br> moraines on till plains                                        |                             |                                    |                                 |                                |  |
| Tuxedni (5%)                                   | No             | <br> till plains                                                    |                             |                                    |                                 |                                |  |
| 639:<br>Puntilla (85%)                         | No             | <br> <br> moraines on till plains                                   |                             |                                    |                                 |                                |  |
| Snowdance (8%)                                 | Yes            | <br> till plains                                                    | 2B3                         | Yes                                | No                              | l No                           |  |
| Spenard (7%)                                   | Yes            | <br> depressions on till plains                                     | 2B3                         | <br>  Yes                          | <br>  No                        | l No                           |  |
| 640:<br>Qutal (77%)                            | No             | <br> <br> moraines on till plains,<br>  depressions on till plains  |                             |                                    | <br> <br>                       | <br>                           |  |
| Spenard (10%)                                  | Yes            | <br> depressions on till plains                                     | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Whitsol (10%)                                  | No             | <br> till plains                                                    |                             |                                    |                                 |                                |  |
| Starichkof (3%)                                | Yes            | <br> fens                                                           | <br>  1                     | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 641:<br>Qutal (80%)                            | No             | <br> moraines on till plains,<br>  depressions on till plains       |                             | <br> <br>                          | <br> <br> <br>                  |                                |  |
| Spenard (10%)                                  | Yes            | depressions on till plains                                          | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Whitsol (10%)                                  | No             | <br> till plains<br>                                                |                             |                                    | <br>                            |                                |  |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                                    | ļ F                            | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------------|--------------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | <br>  Local landform<br> <br>                                      | Hydric<br>  criteria<br>  code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 642:<br>Qutal (80%)                            | <br> <br>-  No<br>         | <br> <br> depressions on till plains,<br>  moraines on till plains |                                | <br> <br>                          | <br> <br> <br>                  | <br> <br> <br>                 |  |  |
| Spenard (10%)                                  | -  Yes                     | <br> moraines on till plains                                       | 2B3                            | Yes                                | No                              | No                             |  |  |
| Whitsol (10%)                                  | - No                       | <br> till plains                                                   |                                |                                    |                                 |                                |  |  |
| 643:<br>Redoubt, terraces (85%)                | <br> <br>-  No             | <br> <br> hills                                                    |                                |                                    | <br> <br>                       |                                |  |  |
| Iliamna, terraces (10%)                        | - No                       | <br> plains                                                        |                                |                                    |                                 |                                |  |  |
| Tuxedni (5%)                                   | - No                       | <br> till plains                                                   |                                |                                    |                                 |                                |  |  |
| 644:<br>Redoubt (85%)                          | <br> -  No                 | <br> <br> hills                                                    |                                | <br> <br>                          | <br> <br>                       |                                |  |  |
| Spenard (9%)                                   | -  Yes                     | <br> moraines on till plains                                       | 2B3                            | Yes                                | l No                            | No                             |  |  |
| Iliamna (6%)                                   | - No                       | <br> hills                                                         |                                |                                    |                                 |                                |  |  |
| 645:<br>Redoubt (85%)                          | <br>-  No                  | <br> -<br> hills                                                   |                                |                                    | <br> <br>                       |                                |  |  |
| Iliamna (8%)                                   | <br>-  No                  | <br> hills                                                         |                                | <br>                               |                                 |                                |  |  |
| Tuxedni (7%)                                   | <br>-  No                  | <br> till plains                                                   |                                |                                    |                                 |                                |  |  |
| 646:<br>Redoubt, cool (80%)                    | <br> <br>-  No             | <br> <br> hills                                                    |                                |                                    | <br> <br>                       |                                |  |  |
| Benka (10%)                                    | - No                       | l<br> outwash plains                                               |                                |                                    |                                 |                                |  |  |
| Spenard (10%)                                  | -  Yes                     | depressions on till plains                                         | 2B3                            | Yes                                | <br>  No                        | No                             |  |  |
| 647:<br>Redoubt, moderately steep (45%)        | <br>-  No                  | <br> <br> hills                                                    |                                |                                    | <br> <br>                       |                                |  |  |
| Redoubt, gently sloping (40%)                  | <br>-  No                  | <br> hills                                                         |                                |                                    |                                 |                                |  |  |
| Starichkof (10%)                               | <br>-  Yes                 | <br> fens                                                          | 1                              | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| Slikok (3%)                                    | <br>-  Yes                 | <br> depressions on till plains                                    | <br>  2B3                      | Yes                                | <br>  No                        | <br>  No                       |  |  |
| Water, fresh (2%)                              | <br>-  Unranked            | I<br>INO DATA                                                      |                                |                                    |                                 |                                |  |  |
| 648:<br>Redoubt, cool (55%)                    | <br> <br>-  No             | <br> <br> hills                                                    |                                |                                    | <br> <br>                       |                                |  |  |
| Tuxedni (35%)                                  | -  No                      | <br> hills, till plains                                            |                                |                                    |                                 |                                |  |  |
| Chunilna (10%)                                 | -  Yes                     | <br> till plains                                                   | <br>  2B3                      | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| 649:<br>Riverwash (100%)                       | <br> <br>- Unranked<br>    | <br> <br> flood plains<br>                                         |                                | <br> <br>                          | <br> <br> <br>                  |                                |  |  |

Table 23. Hydric Soils List—Continued

|                                                |                                 |                                                                | <br>  Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|---------------------------------|----------------------------------------------------------------|-----------------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> <br> | <br>  Local landform<br> <br> -                                | Hydric criteria code        | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 650:<br>Salamatof (70%)                        | <br> <br>  Yes                  | <br> <br> fens on till plains                                  | <br> <br>  1                | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Doroshin (22%)                                 | Yes<br>                         | <br> depressions on till plains,<br>  fens on till plains      | <br>  1<br>                 | Yes                                | <br>  No<br>                    | No                             |  |
| Slikok (5%)                                    | Yes                             | <br> depressions on till plains                                | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Water, fresh (3%)                              | <br> Unranked                   | I<br>INO DATA                                                  |                             |                                    |                                 |                                |  |
| 651:<br>Salamatof (80%)                        | <br>   Yes                      | <br> -<br> fens on till plains                                 | 1                           | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Doroshin (15%)                                 | Yes<br>                         | <br> fens on till plains,<br>  depressions on till plains      | 1                           | Yes                                | No                              | No                             |  |
| Water, fresh (5%)                              | Unranked                        | NO DATA                                                        |                             |                                    | <br>                            |                                |  |
| 652:<br>Slikok (85%)                           | <br>   Yes<br>                  | <br> <br> depressions on till plains,<br>  flood plains        | <br>  2B3<br>               | <br> <br>  Yes<br>                 | <br> <br>  No<br>               | <br> <br>  No<br>              |  |
| Doroshin (10%)                                 | <br>  Yes<br>                   | <br> depressions on till plains,<br>  fens on till plains      | <br>  1<br>                 | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |
| Qutal (4%)                                     | <br>  No<br>                    | <br> moraines on till plains,<br>  depressions on till plains  |                             |                                    | <br> <br>                       | <br> <br>                      |  |
| Water, fresh (1%)                              | <br> Unranked                   | NO DATA                                                        |                             |                                    | <br>                            |                                |  |
| 653:<br>Slikok (82%)                           | <br> <br>  Yes                  | <br> <br> depressions on till plains                           | <br> <br>  2B3              | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |
| Mutnala (10%)                                  | No                              | <br> moraines on till plains                                   |                             |                                    |                                 |                                |  |
| Doroshin (8%)                                  | -  Yes<br> -                    | <br> fens on till plains,<br>  depressions on till plains      | <br>  1<br>                 | <br>  Yes<br>                      | <br>  No<br>                    | No                             |  |
| 654:<br>Smithfha (85%)                         | <br> <br>  No                   | <br> <br> plains                                               |                             |                                    |                                 |                                |  |
| Cohoe, dry (10%)                               | No                              | <br> moraines on till plains                                   |                             |                                    | <br>                            |                                |  |
| Nikolai (5%)                                   | Yes                             | depressions on till plains,<br>  depressions on coastal plains | 1                           | Yes                                | No                              | No                             |  |
| 655:<br>Smithfha (90%)                         | <br> <br>  No                   | <br> <br> hills                                                | <br>                        |                                    | <br> <br>                       | <br> <br>                      |  |
| Coal Creek (5%)                                | Yes                             | <br> depressions on till plains                                | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Starichkof (5%)                                | Yes                             | <br> fens                                                      | 1                           | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 656:<br>Smokey Bay (77%)                       | <br>   No                       | <br> <br> alluvial fans                                        |                             |                                    |                                 |                                |  |
| Beluga (23%)                                   | <br>  Yes<br>                   | <br> alluvial fans<br>                                         | <br>  2B3<br>               | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |

Table 23. Hydric Soils List—Continued

|                                                | <br> <br>                  |                                                               | <br>  Hydric soils criteria |                                    |                                 |                                |  |
|------------------------------------------------|----------------------------|---------------------------------------------------------------|-----------------------------|------------------------------------|---------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                                | Hydric criteria code        | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |
| 657:<br>Smokey Bay (77%)                       | <br> <br>  No              | <br> <br> alluvial fans                                       |                             |                                    |                                 |                                |  |
| Beluga (23%)                                   | l<br>  Yes                 | <br> alluvial fans                                            | 2B3                         | Yes                                | <br>  No                        | No                             |  |
| 658:<br>Snowdance (90%)                        | <br> <br>  Yes             | <br> <br> till plains                                         | <br>  2B3                   | Yes                                | No                              | <br>  No                       |  |
| Kachemak, cool (10%)                           | l<br>  No                  | <br> moraines on till plains                                  |                             |                                    |                                 |                                |  |
| 659:<br>Soldotna (90%)                         | <br> <br>  No<br>          | <br> <br> moraines on till plains, outwash<br>  plains        |                             |                                    | <br>                            |                                |  |
| Tlikakila (7%)                                 | <br>  No<br>               | <br> depressions on terraces,<br>  depressions on till plains |                             |                                    | <br> <br>                       | <br> <br>                      |  |
| Doroshin (3%)                                  | <br>  Yes<br>              | <br> depressions on till plains,<br>  fens on till plains     | 1                           | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |
| 660:<br>Soldotna (90%)                         | <br> <br>  No<br>          | <br>                                                          |                             |                                    | <br> <br>                       | <br> <br> <br>                 |  |
| Kalifonsky (7%)                                | <br>  Yes                  | <br> depressions on till plains                               | 2B3                         | <br>  Yes                          | No                              | No                             |  |
| Starichkof (3%)                                | l<br>  Yes                 | <br> fens                                                     | 1 1                         | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 661:<br>Soldotna (85%)                         | <br> <br>  No<br>          | outwash plains, moraines on till plains                       | <br>                        |                                    | <br>                            |                                |  |
| Kalifonsky (7%)                                | <br>  Yes                  | <br> depressions on till plains                               | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Starichkof (5%)                                | <br>  Yes                  | <br> fens                                                     | 1                           | Yes                                | l No                            | l No                           |  |
| Foreland (3%)                                  | l<br>  Yes<br>             | <br> kame moraines                                            | 2B3                         | Yes                                | No                              | No                             |  |
| 662:<br>Soldotna (85%)                         | <br> <br>  No<br>          | <br> <br> moraines on till plains, outwash<br>  plains        | <br>                        |                                    | <br> <br>                       |                                |  |
| Kalifonsky (7%)                                | <br>  Yes                  | <br> depressions on till plains                               | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Starichkof (5%)                                | <br>  Yes                  | fens                                                          | 1                           | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| Foreland (3%)                                  | <br>  Yes                  | <br> kame moraines                                            | <br>  2B3                   | <br>  Yes                          | <br>  No                        | <br>  No                       |  |
| 663:<br>Soldotna, sandy substratum (80%)       | <br> <br>  No<br>          | <br> -<br> outwash plains, moraines on till<br>  plains       |                             |                                    | <br>                            |                                |  |
| Cohoe, dry (15%)                               | <br>  No                   | <br> moraines on till plains                                  | ļ                           | ļ<br>ļ                             |                                 | ļ                              |  |
| Spenard (5%)                                   | <br>  Yes<br>              | <br> depressions on till plains<br>                           | <br>  2B3<br>               | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |

Table 23. Hydric Soils List—Continued

|                                                | <br> <br>  Hydric<br>  soil<br> |                                                                     | Hydric soils criteria |                                    |                                     |                                |  |
|------------------------------------------------|---------------------------------|---------------------------------------------------------------------|-----------------------|------------------------------------|-------------------------------------|--------------------------------|--|
| Map symbol and soil name (percent composition) |                                 | Local landform                                                      | Hydric criteria code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria<br> | Meets<br> ponding<br> criteria |  |
| 664:<br>Soldotna, sandy substratum (75%)       | <br> <br>  No<br>               | <br> <br> moraines on till plains, outwash<br>  plains              |                       |                                    | <br> <br> <br>                      |                                |  |
| Cohoe, dry (15%)                               | l<br>  No                       | <br> moraines on till plains                                        |                       |                                    |                                     |                                |  |
| Kenai (3%)                                     | l<br>  No                       | moraines on till plains                                             |                       |                                    |                                     |                                |  |
| Tangerra (3%)                                  | <br>  Yes<br>                   | depressions on outwash plains, depressions on moraines              | <br>  2B3<br>         | Yes                                | <br>  No<br>                        | <br>  No<br>                   |  |
| Nikolai (2%)                                   | <br>  Yes<br>                   | <br> depressions on coastal plains,<br>  depressions on till plains | 1 1                   | Yes                                | <br>  No<br>                        | <br>  No<br>                   |  |
| Spenard (2%)                                   | <br>  Yes                       | depressions on till plains                                          | <br>  2B3             | <br>  Yes                          | <br>  No                            | <br>  No                       |  |
| 665: Soldotna, sandy substratum (80%)          | <br> <br>  No<br>               | <br>                                                                |                       |                                    | <br> <br> <br>                      |                                |  |
| Naptowne (10%)                                 | l<br>  No                       | moraines                                                            |                       |                                    |                                     |                                |  |
| Kenai (5%)                                     | <br>  No<br>                    | <br> moraines on till plains                                        | <br>                  | <br>                               | <br> <br>                           |                                |  |
| Tangerra (5%)                                  | <br> <br>  Yes<br>              | <br> depressions on moraines,<br>  depressions on outwash plains    | <br>  2B3<br>         | Yes                                | <br> <br>  No<br>                   | <br>  No                       |  |
| 666: Soldotna, sandy substratum (80%)          | <br> <br>  No<br>               | <br> <br> outwash plains, moraines on till<br>  plains              |                       |                                    | <br> <br> <br>                      | <br>                           |  |
| Cohoe, dry (10%)                               | l<br>  No                       | moraines on till plains                                             |                       |                                    |                                     |                                |  |
| Tangerra (5%)                                  | <br>  Yes<br>                   | <br> depressions on moraines,<br>  depressions on outwash plains    | <br>  2B3<br>         | Yes                                | <br>  No<br>                        | <br>  No<br>                   |  |
| Tuxedni, warm (3%)                             | <br>  No                        | till plains                                                         |                       |                                    | <br>                                |                                |  |
| Coal Creek (2%)                                | <br>  Yes<br>                   | <br> depressions on stream terraces<br>  on till plains             | <br>  2B3<br>         | Yes                                | <br>  No<br>                        | <br>  No                       |  |
| 667: Soldotna, strongly sloping (45%)          | <br> <br>  No<br>               | <br> <br> moraines on till plains, outwash<br>  plains              |                       |                                    | <br> <br> <br>                      |                                |  |
| Soldotna, gently sloping (40%)                 | <br>  No<br>                    | outwash plains, moraines on till plains                             |                       |                                    | <br> <br>                           |                                |  |
| Kalifonsky (7%)                                | <br>  Yes                       | depressions on till plains                                          | 2B3                   | <br>  Yes                          | <br>  No                            | <br>  No                       |  |
| Starichkof (5%)                                | <br>  Yes                       | fens                                                                | 1                     | <br>  Yes                          | <br>  No                            | <br>  No                       |  |
| Foreland (3%)                                  | <br>  Vec                       | stream terraces                                                     | <br>  2B3             | <br>  Yes                          | <br>  No                            | <br>  No                       |  |

Table 23. Hydric Soils List—Continued

|                                                | <br> <br>                  |                                                                     | <br>  Hydric soils criteria<br> |                                    |                                     |                                |
|------------------------------------------------|----------------------------|---------------------------------------------------------------------|---------------------------------|------------------------------------|-------------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                                      | Hydric<br>  criteria<br>  code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria<br> | Meets<br> ponding<br> criteria |
| 668:<br>Soldotna, sandy substratum (55%)       | <br> <br>  No              | <br> <br> moraines on till plains                                   | <br> <br>                       | <br> <br>                          | <br> <br>                           |                                |
| Kenai (40%)                                    | l<br>  No                  | <br> moraines on till plains                                        | ļ                               |                                    | <br>                                |                                |
| Naptowne (5%)                                  | <br>  No                   | <br> moraines                                                       | <br>                            |                                    | <br>                                |                                |
| Clam Gulch (0%)                                | <br>  Yes                  | <br> depressions on till plains                                     | <br>  2B3                       | Yes                                | <br>  No                            | <br>  No                       |
| Cohoe, dry (0%)                                | <br>  No                   | <br> moraines on till plains                                        | <br>                            |                                    | <br>                                |                                |
| 669:<br>Soldotna, sandy substratum (55%)       | <br> <br>  No              | <br> <br> outwash plains                                            | <br> <br>                       | <br> <br>                          | <br> <br>                           |                                |
| Kenai (40%)                                    | <br>  No                   | <br> moraines on till plains                                        | <br>                            |                                    | <br>                                |                                |
| Clam Gulch (5%)                                | <br>  Yes                  | <br> depressions on till plains                                     | <br>  2B3                       | <br>  Yes                          | <br>  No                            | <br>  No                       |
| Cohoe, dry (0%)                                | <br>  No                   | <br> moraines on till plains                                        | <br>                            |                                    | <br>                                |                                |
| Naptowne, gently sloping (0%)                  | <br>  No                   | <br> moraines                                                       | <br>                            |                                    | <br>                                |                                |
| Naptowne, steep (0%)                           | <br>  No                   | <br> moraines                                                       | <br>                            |                                    | <br>                                |                                |
| 670:<br>Soldotna (50%)                         | <br> <br>  No<br>          | <br> <br> outwash plains, moraines on till<br>  plains              | <br> <br>                       | <br> <br> <br>                     | <br> <br> <br>                      |                                |
| Kichatna (40%)                                 | <br>  No<br>               | <br> hills on outwash<br>  plains                                   | <br> <br>                       | <br> <br>                          | <br> <br>                           | <br> <br>                      |
| Foreland (10%)                                 | <br>  Yes                  | <br> kame moraines                                                  | <br>  2B3                       | <br>  Yes                          | <br>  No                            | <br>  No                       |
| 671:<br>Soldotna (50%)                         | <br> <br>  No<br>          | <br> <br> moraines on till plains, outwash<br>  plains              | <br> <br> <br>                  | <br> <br> <br>                     | <br> <br> <br>                      |                                |
| Kichatna (40%)                                 | <br>  No                   | <br> hills on outwash plains                                        | <br>                            |                                    | <br>                                |                                |
| Foreland (10%)                                 | <br>  Yes                  | <br> kame moraines                                                  | <br>  2B3                       | <br>  Yes                          | <br>  No                            | <br>  No                       |
| 672:<br>Soldotna (55%)                         | <br> <br>  No<br>          | <br> <br> outwash plains, moraines on till<br>  plains              | <br> <br> <br>                  | <br> <br> <br>                     | <br> <br> <br>                      | <br> <br>                      |
| Nikolai (45%)                                  | <br>  Yes<br>              | <br> depressions on till plains,<br>  depressions on coastal plains | <br>  1<br>                     | <br>  Yes<br>                      | <br>  No<br>                        | <br>  No<br>                   |
| 673:<br>Spenard (89%)                          | <br> <br>  Yes<br>         | <br> <br> depressions on till plains<br>                            | <br> <br>  2B3                  | <br> <br>  Yes                     | <br> <br>  No<br>                   | <br> <br>  No                  |
| Qutal (9%)                                     | <br>  No<br>               | <br> depressions on till plains,<br>  moraines on till plains       | <br> <br>                       | <br>                               | <br> <br>                           |                                |
| Water, fresh (2%)                              | <br> Unranked<br>          | <br> NO DATA<br>                                                    | <br> <br>                       | <br> <br>                          | <br> <br>                           |                                |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                               | +                          | lydric soils o                     | riteria                         |                                |
|------------------------------------------------|----------------------------|---------------------------------------------------------------|----------------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                                | Hydric<br>criteria<br>code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 674:<br>Spenard (67%)                          | <br> <br>  Yes             | <br> <br> depressions on till plains                          | <br> <br>  2B3             | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Mutnala (15%)                                  | <br>  No                   | <br> moraines on till plains                                  |                            |                                    |                                 |                                |
| Qutal (15%)                                    | <br>  No<br>               | <br> depressions on till plains,<br>  moraines on till plains | <br> <br>                  |                                    | <br> <br>!                      | <br> <br>                      |
| Doroshin (3%)                                  | <br>  Yes<br>              | <br> fens on till plains,<br>  depressions on till plains     | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No                       |
| 675:<br>Spenard (87%)                          | <br> <br>  Yes             | <br> <br> moraines on till plains                             | <br> <br>  2B3             | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Mutnala (10%)                                  | <br>  No                   | <br> moraines on till plains                                  |                            |                                    |                                 |                                |
| Doroshin (3%)                                  | <br>  Yes<br>              | <br> fens on till plains,<br>  depressions on till plains     | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 676:<br>Starichkof (60%)                       | │<br>│<br>·│ Yes           | <br> <br> fens                                                | 1                          | <br> <br>  Yes                     | <br> <br>  No                   | <br>  No                       |
| Doroshin (35%)                                 | <br>-  Yes<br>             | <br> depressions on till plains,<br>  fens on till plains     | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Slikok (5%)                                    | <br>  Yes                  | depressions on till plains                                    | <br>  2B3                  | Yes                                | <br>  No                        | <br>  No                       |
| 677:<br>Starichkof (75%)                       | <br> <br>  Yes             | <br> <br> fens                                                | 1                          | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Doroshin (15%)                                 | <br>  Yes<br>              | <br> depressions on till plains,<br>  fens on till plains     | 1                          | Yes                                | <br>  No<br>                    | No                             |
| Slikok (5%)                                    | <br>  Yes<br>              | <br> depressions on till plains,<br>  flood plains            | <br>  2B3<br>              | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Water, fresh (5%)                              | <br> Unranked              | NO DATA                                                       |                            |                                    |                                 |                                |
| 678:<br>Starichkof (82%)                       | <br> <br>  Yes             | <br> <br> fens                                                | 1                          | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |
| Doroshin (15%)                                 |                            | <br> depressions on till plains,<br>  fens on till plains     | <br>  1<br>                | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Water, fresh (3%)                              | <br> Unranked<br>          | <br> NO DATA<br>                                              | j<br>                      | <br>                               | <br> <br>                       | <br>                           |
| 679:<br>Starichkof, forested (85%)             | <br>  Yes                  | <br> fens                                                     | 1                          | Yes                                | No                              | <br>  No                       |
| Doroshin (10%)                                 | │<br>├│ Yes<br>│           | <br> depressions on till plains,<br>  fens on till plains     | 1                          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Water, fresh (5%)                              | <br> Unranked<br>          | <br> NO DATA<br>                                              | <br>                       | <br>                               | <br> <br>                       | <br>                           |

Table 23. Hydric Soils List—Continued

|                                                |                      |                                                                       | +                    | Hydric soils criteria              |                                 |                                |  |  |
|------------------------------------------------|----------------------|-----------------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|--|--|
| Map symbol and soil name (percent composition) | Hydric<br>  soil<br> | <br>  Local landform<br> <br> -                                       | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |  |  |
| 680:<br>Starichkof (45%)                       | i<br> <br>-  Yes     | <br> <br> <br> fens                                                   | <br> <br>  1         | <br> <br>  Yes                     | <br> <br>  No                   | <br> <br>  No                  |  |  |
| Slikok (30%)                                   | <br>-  Yes<br>       | <br> flood plains, depressions on<br>  till plains                    | <br>  2B3<br>        | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |  |  |
| Naptowne (25%)                                 | <br>-  No            | <br> moraines<br>                                                     |                      |                                    | <br>                            |                                |  |  |
| 681:<br>Starichkof (50%)                       | <br>-  Yes           | <br> <br> fens                                                        | 1                    | <br>  Yes                          | <br> <br>  No                   | <br>  No                       |  |  |
| Spenard (42%)                                  | -  Yes               | depressions on till plains                                            | <br>  2B3            | Yes                                | No                              | No                             |  |  |
| Mutnala (6%)                                   | <br>-  No            | <br> moraines on till plains                                          |                      |                                    |                                 |                                |  |  |
| Water, fresh (2%)                              | <br>- Unranked       | I<br>INO DATA                                                         |                      |                                    |                                 |                                |  |  |
| 682:<br>Susitna (85%)                          | <br> -<br>  No       | <br> <br> stream terraces                                             |                      |                                    | <br> <br>                       |                                |  |  |
| Aquic Cryofluvents (10%)                       | <br>-  No<br>        | <br> alluvial fans on alluvial flats,<br>  channels on alluvial flats |                      |                                    | <br> <br>                       |                                |  |  |
| Riverwash (5%)                                 | <br>-  Unranked      | <br> flood plains                                                     |                      |                                    |                                 |                                |  |  |
| 683:<br>Susitna (85%)                          | <br> -<br>  No       | <br> <br> stream terraces                                             |                      |                                    | <br> <br>                       |                                |  |  |
| Aquic Cryofluvents (15%)                       | <br>-  No<br>        | <br> alluvial fans on alluvial flats,<br>  channels on alluvial flats |                      |                                    | <br> <br>                       |                                |  |  |
| 684:<br>Talkeetna (94%)                        | <br> -<br>  No       | <br> <br> till plains                                                 |                      |                                    | <br> <br>                       |                                |  |  |
| Starichkof (3%)                                | <br>-  Yes           | l<br> fens                                                            | 1                    | <br>  Yes                          | <br>  No                        | No                             |  |  |
| Tuxedni (3%)                                   | <br>-  No            | <br> till plains                                                      |                      |                                    |                                 |                                |  |  |
| 685:<br>Talkeetna (90%)                        | <br> <br>-  No       | <br> <br> hills                                                       |                      |                                    | <br> <br>                       |                                |  |  |
| Chunilna (6%)                                  | <br>-  Yes           | <br> till plains                                                      | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| Qutal (4%)                                     | <br>-  No<br>        | <br> depressions on moraines on till<br>  plains                      | <br> <br>            | <br> <br>                          | <br> <br>!                      | <br> <br>                      |  |  |
| 686:<br>Talkeetna (55%)                        | <br> <br>-  No       | <br> <br> hills                                                       | <br> <br>            |                                    | <br> <br>                       | <br> <br>                      |  |  |
| Starichkof (40%)                               | <br>-  Yes           | <br> fens                                                             | 1 1                  | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |
| Chunilna (5%)                                  | <br>-  Yes           | <br> till plains                                                      | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |  |  |

Table 23. Hydric Soils List—Continued

|                                                |               |                                                                       | <br>  H              | Hydric soils o                     | riteria                         |                                |
|------------------------------------------------|---------------|-----------------------------------------------------------------------|----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric soil   | <br>  Local landform<br> <br> -                                       | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 687:<br>Tangerra (80%)                         | Yes           | <br> <br> depressions on outwash plains,<br>  depressions on moraines | <br> <br>  2B3<br>   | <br> <br>  Yes                     | <br> <br>  No<br>               | <br> <br>  No                  |
| Soldotna (10%)                                 | No<br>        | <br> moraines on till plains, outwash<br>  plains                     |                      |                                    | <br> <br>                       | <br> <br>                      |
| Nikolai (5%)                                   | Yes<br>       | <br> depressions on coastal plains,<br>  depressions on till plains   | <br>  1<br>          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Qutal (3%)                                     | <br>  No<br>  | <br> moraines on till plains,<br>  depressions on till plains         |                      |                                    | <br> <br>                       |                                |
| Kalifonsky (2%)                                | <br>  Yes<br> | <br> depressions on till plains<br>                                   | <br>  2B3<br>        | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 688:<br>Beaches, tidal flats (90%)             | <br> Unranked | <br> beaches                                                          | j<br>                | ļ                                  | <br>                            | <br>                           |
| Water, saline (10%)                            | Unranked      | NO DATA                                                               |                      |                                    |                                 |                                |
| 689:<br>Tlikakila (90%)                        | No            | <br> <br> depressions on terraces,<br>  depressions on till plains    | <br> <br>            | <br> <br>                          | <br> <br> <br>                  |                                |
| Nikolai (10%)                                  | Yes           | <br> depressions on till plains,<br>  depressions on coastal plains   | <br>  1<br>          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| 690:<br>Tlikakila (87%)                        | No<br>        | <br> <br> depressions on terraces,<br>  depressions on till plains    |                      | <br> <br>                          | <br> <br> <br>                  |                                |
| Nikolai (8%)                                   | Yes<br>       | <br> depressions on till plains,<br>  depressions on coastal plains   | <br>  1<br>          | <br>  Yes<br>                      | <br>  No<br>                    | <br>  No<br>                   |
| Kashwitna (5%)                                 | No            | outwash plains, kame moraines                                         |                      |                                    | <br>                            |                                |
| 691:<br>Tlikakila (85%)                        | No            | <br> <br> depressions on till plains,<br>  depressions on terraces    |                      |                                    | <br> <br> <br>                  |                                |
| Chunilna (10%)                                 | <br>  Yes     | till plains                                                           | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Cohoe (5%)                                     | No            | <br> moraines on till plains                                          |                      |                                    | <br>                            |                                |
| 692:<br>Tokositna (85%)                        | No            | <br> <br> till plains                                                 | <br>                 |                                    | <br> <br>                       |                                |
| Spenard (8%)                                   | <br>  Yes     | depressions on till plains                                            | <br>  2B3            | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Tuxedni (7%)                                   | No            | till plains                                                           |                      |                                    |                                 |                                |
| 693:<br>Tokositna (90%)                        | No            | <br> <br> till plains                                                 |                      |                                    | <br> <br>                       |                                |
| Tuxedni (10%)                                  | No            | <br> till plains<br>                                                  |                      |                                    | <br> <br>                       |                                |

Table 23. Hydric Soils List—Continued

|                                                |                            |                                                                    | <br>  H              | lydric soils o                     | riteria                             |                                |
|------------------------------------------------|----------------------------|--------------------------------------------------------------------|----------------------|------------------------------------|-------------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                                     | Hydric criteria code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria<br> | Meets<br> ponding<br> criteria |
| 694:<br>Tokositna (90%)                        | <br> <br>  No              | <br> <br> till plains, hills                                       | <br> <br>            |                                    | <br> <br>                           |                                |
| Spenard (10%)                                  | <br>  Yes                  | <br> moraines on till plains                                       | <br>  2B3            | Yes                                | <br>  No                            | <br>  No                       |
| 695:<br>Truuli (88%)                           | <br> <br>  Yes<br>         | <br> <br> depressions on terraces,<br>  depressions on till plains | <br> <br>  2B3<br>   | <br>  Yes                          | <br> <br>  No<br>                   | <br> <br>  No                  |
| Nikolai (8%)                                   | <br>  Yes<br>              | depressions on coastal plains,<br>depressions on till plains       | <br>  1<br>          | Yes                                | <br>  No<br>                        | <br>  No<br>                   |
| Tuxedni (4%)                                   | <br>  No                   | <br> till plains                                                   |                      |                                    | <br>                                |                                |
| 696:<br>Tutka (45%)                            | <br> <br>  No              | <br> <br> mountain slopes                                          | <br> <br>            |                                    | <br> <br>                           |                                |
| Kasitsna (40%)                                 | No                         | ।<br> mountain slopes<br>।                                         |                      |                                    | <br>                                |                                |
| Rock outcrop (15%)                             | <br> Unranked              | <br> mountains, hills<br>                                          |                      |                                    | <br>                                |                                |
| 697:<br>Tutka (55%)                            | <br>  No                   | <br> <br> mountain slopes                                          | <br>                 |                                    | <br>                                |                                |
| Portgraham (30%)                               | No                         | <br> mountain slopes                                               |                      |                                    |                                     |                                |
| Typic Cryaquands (15%)                         | <br>  Yes                  | <br> mountains                                                     | <br>  2B3            | <br>  Yes                          | <br>  No                            | <br>  No                       |
| 698:<br>Tuxedni (85%)                          | <br> <br>  No              | <br> <br> till plains                                              | <br> <br>            |                                    | <br> <br>                           |                                |
| Redoubt (10%)                                  | <br>  No                   | <br> hills                                                         |                      |                                    |                                     |                                |
| Spenard (5%)                                   | <br>  Yes                  | <br> depressions on till plains                                    | <br>  2B3            | <br>  Yes                          | <br>  No                            | No                             |
| 699:<br>Tuxedni (85%)                          | <br> <br>  No              | <br> hills, till plains                                            | <br> <br>            |                                    | <br> <br>                           |                                |
| Redoubt (10%)                                  | No                         | <br> hills                                                         |                      |                                    | <br>                                |                                |
| Spenard (5%)                                   | <br>  Yes                  | <br> moraines on till plains                                       | 2B3                  | Yes                                | <br>  No                            | No                             |
| 700:<br>Tuxedni, warm (85%)                    | <br> <br>  No              | <br> <br> till plains                                              | <br> <br>            |                                    | <br> <br>                           |                                |
| Truuli (12%)                                   | │<br>├│ Yes<br>│           | <br> depressions on till plains,<br>  depressions on terraces      | <br>  2B3<br>        | <br>  Yes<br>                      | <br>  No<br>                        | No                             |
| Whitsol (3%)                                   | <br>  No                   | <br> till plains                                                   |                      |                                    | <br>                                |                                |
| 701:<br>Typic Cryaquents (95%)                 | <br> <br>  Yes             | <br> <br> deltas, estuaries                                        | <br> <br>  2B3       | <br> <br>  Yes                     | <br> <br>  No                       | <br> <br>  No                  |
| Killey (3%)                                    | <br>  Yes                  | <br> flood plains<br>                                              | <br>  2B3            | <br>  Yes                          | <br>  No                            | <br>  No                       |
| Clunie (2%)                                    | Yes                        | <br> tidal flats<br>                                               | 3,1                  | <br>  Yes                          | <br>  No                            | Yes                            |
| Water, saline (0%)                             | <br> Unranked<br>          | NO DATA                                                            | <br> <br>            |                                    | <br> <br>                           |                                |

Table 23. Hydric Soils List—Continued

|                                                |                    | <br>                                                          | +                          | lydric soils o                     | criteria                        |                                |
|------------------------------------------------|--------------------|---------------------------------------------------------------|----------------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | Hydric<br>soil     | Local landform                                                | Hydric<br>criteria<br>code | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 702: Typic Cryopsamments (84%)                 | <br> <br>  No      | <br> <br> <br> dunes                                          |                            |                                    | <br> <br>                       |                                |
| Smithfha (10%)                                 | No                 | <br> plains                                                   |                            |                                    |                                 |                                |
| Starichkof (4%)                                | <br>  Yes          | <br> fens                                                     | 1                          | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Kalifonsky (2%)                                | <br>  Yes          | depressions on till plains                                    | <br>  2B3                  | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 703: Typic Cryorthents (80%)                   | <br>   No          | <br> <br> sea cliffs                                          |                            |                                    |                                 |                                |
| Badland, sea cliffs (10%)                      | <br> Unranked      | <br> cliffs                                                   |                            |                                    | <br>                            |                                |
| Beluga (5%)                                    | <br>  Yes          | <br> alluvial fans                                            | <br>  2B3                  | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Kachemak (5%)                                  | <br>  No           | <br> moraines on till plains                                  |                            |                                    | <br>                            |                                |
| 704:<br>Urban land (85%)                       | <br> <br> Unranked | <br> <br> NO DATA                                             |                            |                                    |                                 |                                |
| Cohoe (5%)                                     | No                 | <br> moraines on till plains                                  |                            |                                    |                                 |                                |
| Kalifonsky (5%)                                | <br>  Yes          | depressions on till plains                                    | <br>  2B3                  | <br>  Yes                          | <br>  No                        | <br>  No                       |
| Starichkof (5%)                                | Yes                | <br> fens                                                     | 1                          | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 705: Water, fresh (100%)                       | <br> <br> Unranked | I<br>I<br>INO DATA                                            |                            |                                    |                                 |                                |
| 706: Whitsol (90%)                             | No                 | <br> <br> till plains                                         |                            |                                    |                                 |                                |
| Qutal (6%)                                     | No                 | <br> moraines on till plains                                  |                            |                                    |                                 |                                |
| Spenard (4%)                                   | Yes                | depressions on till plains                                    | 2B3                        | Yes                                | <br>  No                        | No                             |
| 707: Whitsol (90%)                             | No                 | <br> <br> till plains                                         |                            |                                    |                                 |                                |
| Qutal (6%)                                     | No                 | <br> moraines on till plains,<br>  depressions on till plains |                            |                                    |                                 |                                |
| Spenard (4%)                                   | Yes                | depressions on till plains                                    | 2B3                        | <br>  Yes                          | <br>  No                        | <br>  No                       |
| 708: Whitsol (85%)                             | No                 | <br> <br> till plains, hills<br>                              |                            |                                    |                                 |                                |
| Kashwitna (10%)                                | No                 | outwash plains, kame moraines                                 |                            |                                    |                                 |                                |
| Spenard (5%)                                   | Yes                | <br> moraines on till plains                                  | 2B3                        | <br>  Yes                          | No                              | No                             |
| 709: Whitsol (85%)                             | No                 | <br>                                                          |                            |                                    |                                 |                                |
| Kashwitna (10%)                                | No                 | kame moraines, outwash plains                                 |                            |                                    |                                 |                                |
| Spenard (5%)                                   | Yes                | <br> moraines on till plains                                  | <br>  2B3                  | <br>  Yes                          | l<br>l No                       | <br>  No                       |

Table 23. Hydric Soils List—Continued

|                                                | į                          |                                                           | Hydric soils criteria |                                    |                                 |                                |
|------------------------------------------------|----------------------------|-----------------------------------------------------------|-----------------------|------------------------------------|---------------------------------|--------------------------------|
| Map symbol and soil name (percent composition) | <br>  Hydric<br>  soil<br> | Local landform                                            | Hydric criteria code  | Meets<br> saturation<br>  criteria | Meets<br> flooding<br> criteria | Meets<br> ponding<br> criteria |
| 710: Whitsol (85%)                             | <br> <br>  No              | <br> -<br> hills                                          |                       | <br> <br>                          | <br> <br>                       | <br> <br>                      |
| Kashwitna (5%)                                 | l<br>  No                  | kame moraines, outwash plains                             |                       |                                    |                                 |                                |
| Redoubt (5%)                                   | <br>  No                   | <br> hills                                                |                       |                                    | <br>                            |                                |
| Spenard (5%)                                   | <br>  Yes                  | moraines on till plains                                   | 2B3                   | Yes                                | <br>  No                        | <br>  No                       |
| 711: Whitsol (55%)                             | <br> <br>  No              | <br> -<br>                                                |                       |                                    | <br> <br>                       |                                |
| Doroshin (30%)                                 | <br>  Yes<br>              | <br> depressions on till plains,<br>  fens on till plains | 1                     | Yes                                | No                              | No                             |
| Spenard (15%)                                  | <br>  Yes<br>              | <br> depressions on till plains<br>                       | <br>  2B3<br>         | <br>  Yes                          | No                              | No                             |

## Table 24. Classification of the Soils

| Soil name          | Family or higher taxonomic class                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Alic Haplocryands  | Alic Hanlocryands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |
| Aquic Cryofluvents |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
|                    | Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
|                    | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
| Sovoar             | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |
| henega             | Sandy-skeletal, mixed Typic Cryofluvents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| hulitna            | Sandy-skeletal, mixed Typic Cryolidvents<br>  Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
|                    | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Fiabloci yous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |
| Nam Gulah          | Fine-silty, mixed, superactive, nonacid Humic Cryaquepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| Nunia              | In ine-sity, mixed, superactive, nonacid numic Gryaquepts  Loamy, mixed, euic Terric Cryofibrists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |
|                    | Coarry, mixed, edic Ferric Gryonibrisis    Coarse-loamy, mixed, superactive, acid Humic Cryaquepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |
| Soboo              | Madic Journ John Charles   Madic Journ Journ   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal   Madic Journal |  |  |  |  |  |
| Onoe               | Medial over loamy, amorphic over mixed, superactive Andic Haplocryods<br> Medial over sandy or sandy-skeletal, amorphic over mixed Aquandic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
| Soreabin           | I learny mixed evic Terric Chaleman                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |
|                    | Loamy, mixed, euic Terric Cryohemists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| ystrocryepts       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| iompo              | Sandy, mixed Histic Cryaquepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| land               | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| SidiiU<br>Sachamak | Medial over loamy, amorphic over mixed, superactive Pachic Fulvicryands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
|                    | Medial over loamy, mixed, superactive Vitric Fulvicryands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| CalliUNSKY         | Coarse-silty over sandy or sandy-skeletal, mixed, superactive, acid Typic Cryaquents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |
| \ariuk<br>/  it    | Fine-silty, siliceous, semiactive, acid Humic Cryaquepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| (ashwitha          | Medial over sandy or sandy-skeletal, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
| Kasitsna           | Medial over loamy-skeletal, amorphic over mixed, superactive, acid Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |
| kenai              | Medial over loamy, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| denatna            | Sandy-skeletal, mixed Typic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
| azqeni             | Sandy-skeletal, mixed Typic Cryofluvents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| illey              | Coarse-loamy over sandy or sandy-skeletal, mixed, active, acid Typic Cryaquents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
|                    | Sandy, mixed Typic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| ithic Haplocryands |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| ongmare            | Medial over sandy or sandy-skeletal, amorphic over mixed Aquandic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
| loose River        | Coarse-loamy, mixed, active, nonacid Typic Cryaquents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
|                    | Medial over loamy, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| laptowne           | Medial over loamy, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| Niklason           | Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| Nikolaevsk         | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Cryaquods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| likolai            | Loamy, mixed, dysic Terric Cryosaprists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
| ortgraham          | Medial, amorphic, superactive Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| ountilla           | Medial over loamy, amorphic over mixed, superactive Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |
| Qutal              | Medial over loamy, amorphic over mixed, superactive Aquandic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| Redoubt            | Medial over loamy, amorphic over mixed, superactive Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |
| Salamatof          | Dysic Sphagnic Cryofibrists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |
| Slikok             | Coarse-silty, mixed, superactive, acid Histic Cryaquepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
|                    | Coarse-loamy, mixed, superactive Typic Dystrocryepts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |
|                    | Coarse-loamy, mixed, active, nonacid Oxyaquic Cryorthents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| Snowdance          | Medial over loamy-skeletal, amorphic over mixed, superactive, nonacid Typic Cryaquands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| Soldotna           | Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
| Spenard            | Medial over loamy, amorphic over mixed, superactive Andic Cryaquods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |
| Starichkof         | Dysic Fluvaquentic Cryohemists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| Busitna            | Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |
| alkeetna           | Medial over loamy-skeletal, amorphic over mixed, superactive Andic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
| angerra            | Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Typic Cryaquods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
| ʻlikakila          | Medial over sandy or sandy-skeletal, amorphic over mixed, acid Typic Cryaquands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| okositna           | Medial over loamy-skeletal, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| ruuli              | Medial over loamy, amorphic over mixed, superactive, acid Histic Cryaquands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |
| utka               | Medial, amorphic Lithic Humicryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |
| uxedni             | Medial over loamy, amorphic over mixed, active Aquic Haplocryands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |
| ypic Cryaquands    | Typic Cryaquands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
| ypic Cryaquents    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
|                    | Typic Cryopsamments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |
| Typic Cryorthents  | Typic Cryorthents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |
| Vibitaal           | Medial over loamy, amorphic over mixed, superactive Andic Haplocryods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |

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