United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with United States Department of the Interior, Bureau of Land Management; United States Department of Agriculture, Forest Service; University of Idaho, College of Agriculture; and Idaho Soil Conservation Commission

Soil Survey of Oneida County Area, Idaho

How To Use This Soil Survey

General Soil Map

The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

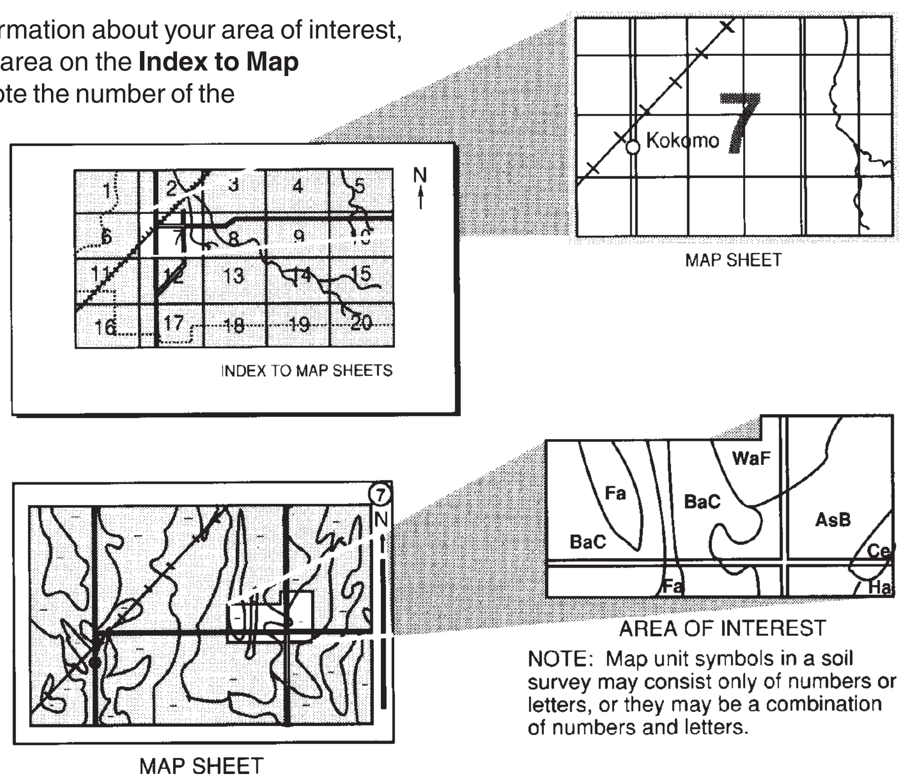
To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

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 Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1990. Soil names and descriptions were approved in 1992. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1992. This survey was made cooperatively by the Natural Resources Conservation Service and the Bureau of Land Management; the Forest Service; the University of Idaho, College of Agriculture; and the Idaho Soil Conservation Commission. The survey is part of the technical assistance furnished to the Oneida Soil and Water Conservation District.

The most current soil information and interpretations for this survey area are available either through the Soil Data Mart or in the Field Office Technical Guide (FOTG) at the local field office of the Natural Resources Conservation Service. The Soil Data Mart is the Natural Resources Conservation Service data storage site for the official soil survey information. The FOTG is linked to the Soil Data Mart; therefore, the same information is available from both sources. Soil survey maps and tabular data can be accessed through the Soil Data Mart at http://soildatamart.nrcs.usda.gov. The official soil survey information stored at the Soil Data Mart and this soil survey report are also available through Web Soil Survey at http://soils.usda.gov/survey.

Cover: Samaria and Sterling soils in foreground, Parleys and Welby soils on terraces in background, and Ridgecrest and Hymas soils on mountains in background.

Additional information about the Nation’s natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

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Foreword

This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, 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. Planners, community officials, 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. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. 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 local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Richard W. Sims
State Conservationist
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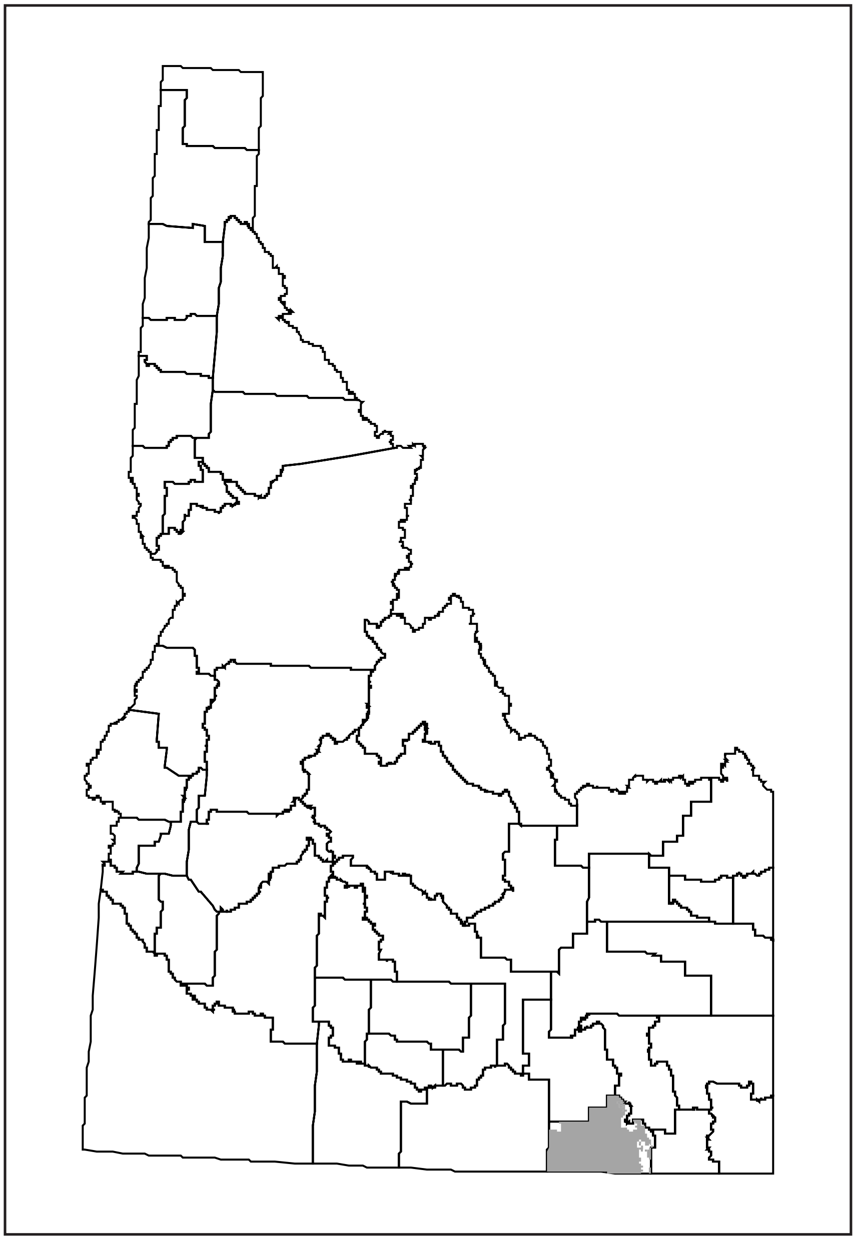

Location of Oneida County Area in Idaho.

Soil Survey of
Oneida County Area, Idaho

By Shawn McVey, Natural Resources Conservation Service

Fieldwork by Ray Grow, Rulon Winward, Grant Butler, Mike Petersen, Larry Lang, Charles McCarver, and Chad McGrath, Natural Resources Conservation Service; Leland Sasser, Warren Archer, Mary Spencer, and Ken Adams, Idaho Soil Conservation Commission; and Dean Davidson, Forest Service

United States Department of Agriculture, Natural Resources Conservation Service,
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ONEIDA COUNTY AREA is in the southeastern part of Idaho. It includes all of Oneida County except the part that is in Caribou National Forest. The Curlew National Grasslands is included in the survey area. The total area is 679,000 acres, or about 1,060 square miles. In 1990 the population of Malad City, the county seat, was about 2,000.

The survey area consists mainly of north-south trending valleys and mountain ranges. The Sublett and Deep Creek Ranges are in the western one-third of the county, and they are surrounded by Curlew Valley. The Samaria and Promontory Ranges are in the south-central part of the county, and Pocatello Valley is between these mountain ranges. On the eastern side of the county are the Elk Horn Mountains to the north and the Malad Range to the south. Malad Valley, which is one of the northernmost reaches of Old Lake Bonneville, is between Samaria Mountain and the Malad Range. The Malad River, a major stream in the survey area, flows out of the northern mountain valleys and winds through the lake plains of Malad Valley. Another major stream, Deep Creek, runs through the lake plains of Curlew Valley, in the central part of the survey area.

The lowest point in the survey area, about 4,300 feet, is in the southern part of Malad Valley. The highest point, about 7,700 feet, is on Samaria Mountain.

This survey provides information about soils that is useful in land use management. The survey area was mapped at two levels of detail. The areas of cropland and wetland were mapped at the more detailed level, and the areas of rangeland were mapped at the less detailed level.

General Nature of the Survey Area

This section gives general information about the survey area. It discusses history and development, natural resources, agriculture, and climate.

History and Development

Very little is known about the original inhabitants of Malad Valley. Native American folklore provides some insight into their history, but it is not conclusive in determining historical fact. The Native Americans in the valley belonged to a northern tribe of the Shoshonean family.

In the early 1800's, the St. Louis Missouri Fur Company sent parties to the Malad area to trap fur-bearing animals. One of the earliest accounts of the exploration of Malad Valley is a report by William Ashley dated December 1, 1825. Other early explorers were Jim Bridger and Peter Skene Ogden.

The first European to settle permanently in Malad Valley was A.W. Vanderwood in 1863. Two years later the Church of Jesus Christ of Latter Day Saints sent families from Salt Lake City, Utah, to settle in Malad Valley.

In January 1864, the first session of the Idaho Legislature met at Lewiston, Idaho. One of the first acts was the creation of Oneida County with the county seat at Soda Springs. In 1866, the county seat was moved to Malad City. At that time Oneida County included the present-day counties of Bannock, Bear Lake, Franklin, Madison, Caribou, Teton, Fremont, Bingham, Power, and Bonneville. The first courthouse in the county, one of the first in Idaho, was built in 1882 at a cost of $12,000.

Farming was the main source of income for the first few years, but then for a period of about 15 years an infestation of grasshoppers and crickets kept families from making a living raising crops. During this time, men found work in the mines at Butte, Montana, or as laborers for the railroad being built across the continent. Many of the men also made a living freighting; however, in 1879 the Utah Northern Railroad came to northern Utah and put an end to most freighting. At about this time, the grasshoppers and crickets disappeared and farming again became a means of making a living. For almost two decades, the population stayed about the same while the people developed their farms, ranches, and community.

The early settlers diverted water for irrigation from Devil and Marsh Creeks. By the early 1870's all the most desirable land and irrigation water had been claimed, so some farmers began successful dry-farm operations. As the farmers became more familiar with the different methods of cultivation, the farms became more successful.

With the vast ranges of grass and sufficient water, the cattle industry became an important part of the economy in the county. Cattle associations were formed primarily for protection against rustling. Other goals of the associations included improving rangeland and increasing sales. In the winter of 1886-1887, a severe ice storm killed many of the cattle. The Promontory Cattle Company had 30,000 head of cattle and lost all but 800 head during the storm, which they shipped to Brigham City by railroad to feed for the rest of the winter. This storm lead to the further development of dryland farming.

On January 1, 1906, a branch of the Oregon Short Line Railroad brought the first train to Malad City, connecting Corinne, Utah, to Malad City, and bringing new prosperity. The population of 1,300 doubled during the 10-year period from 1910 to 1920.

Transportation presently is provided by the railroad, highways, and a small airport in Malad City. Interstate Highway 15 runs the length of Oneida County, from the Utah State line to Bannock County.

Natural Resources

Soil and water are the most important natural resources in the survey area. Among the marketable products are small grain and hay, livestock, gravel, and pumice.

Water in the survey area is used primarily for domestic purposes, livestock, and irrigation. Springs and deep wells supply most of the water used for domestic purposes. Perennial streams and spring developments provide adequate supplies of water for livestock in most parts of the survey area. Irrigation water in Malad Valley is provided by Deep Creek, Devil Creek, and Daniels Reservoir. In the Holbrook and Juniper areas, water is supplied primarily by deep wells. Water for the Stone Area is supplied by deep wells and by Curlew Reservoir. Water is also diverted from major streams in the survey area to irrigate small acreages of the bottomland.

Pumice is the main mining product in the survey area. Deposits of pumice are abundant in the Daniels and Dairy Creek areas. Pumice from the survey area is shipped around the world. It is used in cleanser abrasives, paint pigment, glue components, and potting soil. Some sand and gravel is also mined.

Agriculture

The farming and ranching industries in the survey area have flourished since the construction of the railroad. The first settlers were primarily ranchers, but they soon discovered that the soil in the area is quite fertile. Farmers began to plow up the sagebrush and plant crops. With the development of the tractor and bigger and better machinery, especially after World War II, large acreages of rangeland were converted to cropland. The majority of the cropland in the survey area is nonirrigated; the irrigated areas are primarily in Curlew and Malad Valleys.

Drought and frost in the survey area limit the production of most crops. Wheat, barley, and small amounts of alfalfa are the dominant crops raised in the nonirrigated areas. Wheat, barley, alfalfa, and some potatoes are the major crops grown in the irrigated areas. Some meadow hay is grown in an area south of Malad City, along the Malad River. Most of the operations in the area are a combination of farming and livestock operations.

Most of the nonirrigated cropland in the survey area is in gently sloping to moderately steep areas. As early as 1930, farmers observed the erosion and siltation along the streams as land was converted from rangeland to cropland. They realized the need for soil and water conservation and for control of the devastating effects of soil erosion. The Oneida Soil and Water Conservation District was established May 22, 1940.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Malad City, Idaho, in the period 1948 to 1991. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is 24 degrees F and the average daily minimum temperature is 12 degrees. The lowest temperature on record, which occurred on February 6, 1982, is -35 degrees. In summer, the average temperature is 66 degrees and the average daily maximum temperature is 86 degrees. The highest recorded temperature, which occurred on August 9, 1990, is 102 degrees.

Growing degree days are shown in table 1. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 13.53 inches. Of this, 7 inches, or 52 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 2.31 inches. The heaviest 1-day rainfall during the period of record was 2.13 inches on July 22, 1979. Thunderstorms occur on about 24 days each year, and most occur in July.

The average seasonal snowfall is about 41 inches. The greatest snow depth at any one time during the period of record was 44 inches. On the average, 76 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

The average relative humidity in midafternoon is about 44 percent. Humidity is higher at night, and the average at dawn is about 72 percent. The sun shines 79 percent of the time possible in summer and 44 percent in winter. The prevailing wind is from the southwest. Average windspeed is highest, 12 miles per hour, in April.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

General Soil Map Units

The general soil map in this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one map unit can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

1. Ridgecrest-Hondoho-Hymas

Very deep, moderately deep, and shallow, moderately sloping to very steep, well drained soils that formed in colluvium and residuum derived primarily from limestone and alluvium from mixed sources

Percentage of survey area: 37 percent
Landform: Ridgecrest—mountains; Hondoho—mountains, hills, and fan remnants; Hymas—mountains and ridges
Elevation: 5,000 to 7,500 feet
Frost-free period: 70 to 100 days
Mean annual precipitation: 12 to 18 inches
Minor components: Calpac, Manila, Pavohroo, and Povey soils
Major uses: Nonirrigated cropland, nonirrigated hayland, and rangeland

2. Lonigan-Copenhagen-Manila

Very deep, moderately deep, and shallow, gently sloping to steep, well drained soils that formed in alluvium, residuum, and colluvium derived from tuff, tuffaceous limestone, and loess

Percentage of survey area: 3 percent
Landform: Lonigan—mountains; Copenhagen—mountains and ridges; Manila—fan remnants, hills, and mountains
Elevation: 4,800 to 6,500 feet
Frost-free period: 70 to 95 days
Mean annual precipitation: 14 to 19 inches
Minor components: Lizdale, Pavohroo, and Stines soils
Major uses: Nonirrigated cropland and rangeland

3. Hutchley-McCarey-Araveton

Very deep, moderately deep, and shallow, gently sloping to steep, well drained soils that formed in loess, residuum, colluvium, and alluvium derived from basalt and other mixed igneous rock

Percentage of survey area: 3 percent
Landform: Hutchley—hills on lava plains; McCarey—undulating lava plains; Araveton—fan remnants and lava plains
Elevation: 4,900 to 6,200 feet
Frost-free period: 55 to 100 days
Mean annual precipitation: 12 to 16 inches
Minor components: Raldridge soils
Major uses: Rangeland and nonirrigated cropland

4. Arbone-Rexburg-Hondoho

Very deep, nearly level to gently sloping, well drained soils that formed in alluvium and loess derived from mixed sources

Percentage of survey area: 15 percent
Landform: Arbone—fan remnants; Rexburg—fan remnants and hills; Hondoho—hills and fan remnants
Elevation: 5,000 to 6,700 feet
Frost-free period: 75 to 100 days
Mean annual precipitation: 12 to 18 inches
Minor components: Cedarhill, Justesen, Lanoak, and Ririe soils
Major uses: Irrigated and nonirrigated cropland, nonirrigated hayland and pastureland, and rangeland

5. Ririe-Rexburg-Cedarhill

Very deep, nearly level to steep, well drained soils that formed in alluvium and loess derived from mixed sources and in alluvium and colluvium derived from limestone, quartzite, and sandstone

Percentage of survey area: 6 percent
Landform: Ririe—hills and fan remnants; Rexburg—fan remnants and hills; Cedarhill—fan remnants and mountains
Elevation: 5,000 to 6,500 feet
Frost-free period: 70 to 100 days
Mean annual precipitation: 12 to 17 inches
Minor components: Iphil, Watercanyon, and Wursten soils
Major uses: Nonirrigated cropland, nonirrigated hayland, and rangeland

6. Manila-Elevator-Jensen

Very deep, nearly level to steep, well drained and moderately well drained soils that formed in alluvium, colluvium, and lacustrine deposits derived from mixed sources and limestone, quartzite, sandstone, and tuff

Percentage of survey area: 8 percent
Landform: Manila—fan remnants; Elevator—lake terraces; Jensen—fan remnants and lake terraces
Elevation: 4,900 to 6,500 feet

Frost-free period: 70 to 100 days
Mean annual precipitation: 13 to 19 inches
Minor components: Broadhead, Thatcher, and Yago soils
Major uses: Irrigated and nonirrigated cropland, nonirrigated hayland, and rangeland

7. Parleys-Kearns-Tirod

Very deep, nearly level to strongly sloping, well drained soils that formed in alluvium and lacustrine deposits derived from mixed sources and quartzite

Percentage of the survey area: 7 percent
Landform: Parleys and Kearns—lake terraces; Tirod—fan remnants and lake terraces
Elevation: 4,300 to 5,200 feet
Frost-free period: 100 to 130 days
Mean annual precipitation: 12 to 16 inches
Minor components: Buckboard, Neeley, Welby, and Wheelon soils
Major uses: Irrigated and nonirrigated cropland and hayland

8. Hans-Collinston-Hillfield

Very deep, nearly level to steep, well drained soils that formed in lacustrine deposits derived from mixed sources and tuff, tuffaceous sandstone, limestone, and conglomerate

Percentage of survey area: 2 percent
Landform: Hans and Collinston—lake terraces; Hillfield—dissected lake terraces
Elevation: 4,400 to 5,500 feet
Frost-free period: 110 to 130 days
Mean annual precipitation: 13 to 16 inches
Minor components: Kearns, Kucera, Parleys, and Welby soils
Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland

9. Samaria-Sterling-Kidman

Very deep, nearly level to moderately steep, well drained soils that formed in lacustrine deposits and alluvium derived from mixed sources

Percentage of survey area: 7 percent
Landform: Samaria—lake terraces and fan remnants; Kidman—lake terraces; Sterling—fan remnants and hills
Elevation: 4,500 to 5,500 feet
Frost-free period: 100 to 120 days
Mean annual precipitation: 12 to 16 inches
Minor components: DeJarnet, Highcreek, Pollynot, and Tickason soils
Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland

10. Ecur-Darkbull

Very deep, nearly level to moderately steep, well drained soils that formed in alluvium and lacustrine deposits with loess influence derived from sedimentary rock and in alluvium derived from mixed sources

Percentage of survey area: 2 percent
Landform: Ecur—lake terraces and fan remnants; Darkbull—fan remnants

Elevation: 4,400 to 5,000 feet
Frost-free period: 100 to 120 days
Mean annual precipitation: 10 to 13 inches
Minor components: Bayhook, DeJarnet, and Pyrat soils
Major uses: Rangeland and irrigated cropland

11. Bayhook-Freedom-Mellor

Very deep, nearly level to gently sloping, well drained soils that are slightly affected by salts and sodium and formed in lacustrine deposits and alluvium derived from mixed sources and sedimentary rock

Percentage of survey area: 6 percent
Landform: Lake terraces
Elevation: 4,300 to 4,700 feet
Frost-free period: 100 to 130 days
Mean annual precipitation: 8 to 12 inches
Minor components: Ecur soils
Major uses: Nonirrigated and irrigated cropland, hayland, and pastureland, and rangeland

12. Logan-Goosenawt-Jovine

Very deep, nearly level to gently sloping, well drained, moderately well drained, and poorly drained soils that formed in alluvium and lacustrine deposits derived from mixed sources

Percentage of survey area: 4 percent
Landform: Logan—lake terraces and flood plains; Goosenawt—flood plains; Jovine—depressions and low stream terraces
Elevation: 4,300 to 5,200 feet
Frost-free period: 80 to 130 days
Mean annual precipitation: 12 to 16 inches
Minor components: Bloor, Brinnum, Fridlo, Lagonot, and Langless soils
Major uses: Irrigated and nonirrigated cropland and hayland, irrigated pastureland, and rangeland

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.

A map unit delineation on a 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 other taxonomic classes.

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 noncontrasting, or similar, inclusions. They may or may not be mentioned in the map unit description. Other included soils and miscellaneous areas, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, inclusions. 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 included areas of contrasting soils or miscellaneous areas are mentioned in the map unit descriptions. A few included areas 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 included areas 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.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Arbone silt loam, 0 to 4 percent slopes, is a phase of the Arbone series.

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

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. Araveton-Hades complex, 4 to 12 percent slopes, 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. Calpac-Ridgecrest-Ireland association, 40 to 70 percent slopes, is an example.

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

Table 4 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.

1—Araveton-Hades complex, 4 to 12 percent slopes

Composition

Araveton and similar soils—50 percent
Hades and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Plains and fan remnants
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
    Precipitation—about 16 inches
    Air temperature—about 44 degrees F
    Frost-free period—75 to 100 days

Characteristics of Araveton

Position on landscape: Concave slopes
Typical profile:
    0 to 8 inches—grayish brown silt loam
    8 to 36 inches—brown silt loam
    36 to 62 inches—pale brown and very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Hades

Position on landscape: Smooth slopes
Typical profile:
0 to 20 inches—dark grayish brown and grayish brown silt loam
20 to 42 inches—brown silty clay loam
42 to 60 inches—yellowish brown gravelly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Cedarhill soils on south-facing, concave slopes (5 percent)
- Hondoho soils on smooth or concave slopes (5 percent)
- Jensen soils on smooth or concave, north-facing slopes (5 percent)
- Ririe soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 3e, nonirrigated

2—Arbone silt loam, 0 to 4 percent slopes

Composition

Arbone and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,700 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 44 degrees F
Frost-free period—75 to 100 days

Characteristics of Arbone

Typical profile:
0 to 15 inches—grayish brown silt loam
15 to 60 inches—brown, light brownish gray, and very pale brown gravelly silt loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Darkbull soils on backslopes of terraces (5 percent)
- Rexburg soils on slightly convex slopes (10 percent)
- Ridgecrest soils on adjacent mountains near the edges of areas of this unit (5 percent)
- Soils that have slopes of more than 4 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, hayland, and pastureland
Major management factors: Growing season and depth to carbonates

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Conserve moisture by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Nonirrigated hayland and pastureland
Suitable crops: Alfalfa hay and grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as managing nutrients and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Interpretive Groups

Land capability classification: 3c, nonirrigated

3—Arbone silt loam, 4 to 12 percent slopes

Composition

Arbone and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,700 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 44 degrees F
Frost-free period—75 to 100 days

Characteristics of Arbone

Typical profile:
0 to 15 inches—grayish brown silt loam
15 to 60 inches—brown, light brownish gray, and very pale brown gravelly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Hondoho soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, hayland, and pastureland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Reduce the risk of water erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Nonirrigated hayland and pastureland
Suitable crops: Alfalfa hay and grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as managing nutrients and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Interpretive Groups

Land capability classification: 3e, nonirrigated

4—Arbone silt loam, 12 to 20 percent slopes

Composition

Arbone and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,700 feet

Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 44 degrees F
Frost-free period—75 to 100 days

Characteristics of Arbone

Typical profile:
0 to 15 inches—grayish brown silt loam
15 to 60 inches—brown, light brownish gray, and very pale brown gravelly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Hondoho soils on convex slopes (5 percent)
- Ririe soils on slightly concave slopes and Neeley soils on smooth to convex slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 20 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland and rangeland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the rangeland is limited by water erosion.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

5—Arbone-Hondoho-Cedarhill complex, 4 to 12 percent slopes

Composition

Arbone and similar soils—35 percent
Hondoho and similar soils—30 percent
Cedarhill and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Plains and fan remnants
Elevation: 5,000 to 6,700 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 43 degrees F
  Frost-free period—75 to 100 days

Characteristics of Arbone

Position on landscape: Southwest-facing slopes
Typical profile:
  0 to 15 inches—grayish brown silt loam
  15 to 60 inches—brown, light brownish gray, and very pale brown gravelly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Hondoho

Position on landscape: South-facing slopes
Typical profile:
  0 to 14 inches—grayish brown gravelly silt loam
  14 to 28 inches—pale brown very cobbly loam
  28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Cedarhill

Position on landscape: South- and west-facing slopes
Typical profile:
  0 to 7 inches—grayish brown gravelly silt loam
  7 to 12 inches—light brownish gray gravelly loam

12 to 27 inches—very pale brown very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Ridgecrest soils on ridges and backslopes (5 percent)
- Ririe soils on backslopes (3 percent)
- Toefoot soils in depressions (3 percent)
- Rexburg soils in depressions (2 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by constructing terraces, chiseling or subsoiling fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: Arbone and Hondoho—3e, nonirrigated; Cedarhill—4e, nonirrigated

6—Arbone-Hondoho-Cedarhill complex, 12 to 30 percent slopes

Composition

Arbone and similar soils—45 percent
Hondoho and similar soils—25 percent
Cedarhill and similar soils—20 percent
Minor components—10 percent

Setting

Landform: Plains and fan remnants
Elevation: 5,000 to 6,700 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 43 degrees F
  Frost-free period—75 to 100 days

Characteristics of Arbone

Position on landscape: Southwest-facing, smooth or concave slopes
Typical profile:
  0 to 15 inches—grayish brown and brown silt loam
  15 to 60 inches—brown and very pale brown gravelly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.4 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: Concave slopes
Typical profile:
  0 to 14 inches—grayish brown gravelly silt loam
  14 to 28 inches—pale brown very cobbly loam
  28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Cedarhill

Position on landscape: Convex slopes
Typical profile:
  0 to 7 inches—grayish brown gravelly silt loam
  7 to 12 inches—light brownish gray gravelly loam
  12 to 27 inches—very pale brown very gravelly loam
  27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Justesen soils in depressions and on toeslopes (3 percent)
- Toefoot soils in depressions (3 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (2 percent)

- Watercanyon soils on convex toeslopes (2 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 4e, nonirrigated

7—Bayhook silt loam, 0 to 2 percent slopes

Composition

Bayhook and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 4,700 feet
Climatic data (mean annual):
Precipitation—about 10 inches
Air temperature—about 47 degrees F
Frost-free period—110 to 130 days

Characteristics of Bayhook

Typical profile:
0 to 7 inches—light brownish gray silt loam
7 to 13 inches—light brownish gray and pale brown silt loam
13 to 60 inches—light gray and pale yellow silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight; by wind—moderate

Minor Components

- Ecur soils on low terraces (5 percent)
- Pyrat soils on low terraces (3 percent)
- Small areas of saline soils on concave slopes (2 percent)

Use and Management

Major uses: Rangeland and irrigated cropland
Major management factors: Depth to carbonates and wind erosion

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by wind erosion and low precipitation.

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion and conserve moisture by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 3s, irrigated, and 6s, nonirrigated
Ecological site: Loamy, 8- to 11-inch precipitation zone

8—Bayhook-Ecur complex, 0 to 4 percent slopes

Composition

Bayhook and similar soils—55 percent
Ecur and similar soils—35 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 11 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 130 days

Characteristics of Bayhook

Position on landscape: Smooth slopes
Typical profile:
0 to 7 inches—light brownish gray silt loam
7 to 13 inches—light brownish gray and pale brown silt loam
13 to 60 inches—light gray and pale yellow silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more

Runoff: Low
Hazard of erosion: By water—slight; by wind—moderate

Characteristics of Ecur

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 15 inches—light brownish gray fine sandy loam
15 to 37 inches—light gray fine sandy loam
37 to 44 inches—light gray loamy fine sand
44 to 49 inches—light gray gravelly loamy fine sand
49 to 60 inches—light gray loamy fine sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 6.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very low
Hazard of erosion: By water—slight; by wind—severe

Minor Components

- Darkbull soils on low terraces (5 percent)
- Pyrat soils on low terraces (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Wind erosion
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by low precipitation and wind erosion.

Interpretive Groups

Land capability classification: Bayhook—6s, nonirrigated; Ecur—6c, nonirrigated
Ecological site: Bayhook—Loamy, 8- to 11-inch precipitation zone; Ecur—Loamy, 11- to 13-inch precipitation zone

9—Bingham gravelly loam, 1 to 4 percent slopes

Composition

Bingham and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,500 to 4,900 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Bingham

Typical profile:
0 to 6 inches—grayish brown gravelly loam
6 to 27 inches—grayish brown and yellowish brown gravelly loam
27 to 38 inches—light yellowish brown very gravelly sandy loam
38 to 65 inches—very pale brown very gravelly loamy sand and variegated very gravelly loamy coarse sand

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate in the upper part and very rapid in the lower part
Available water capacity: 4.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Kidman soils on convex slopes (5 percent)
- Tirod soils on smooth slopes (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland
Major management factors: Rock fragments on the surface and available water capacity

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Rock fragments on the surface make seedbed preparation difficult.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3s, irrigated, and 6s, nonirrigated

10—Bingham-Tirod complex, 0 to 2 percent slopes

Composition

Bingham and similar soils—45 percent
Tirod and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Fan remnants and lake terraces
Elevation: 4,300 to 5,000 feet

Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 130 days

Characteristics of Bingham

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 6 inches—grayish brown gravelly loam
6 to 27 inches—grayish brown and yellowish brown gravelly loam
27 to 38 inches—light yellowish brown very gravelly sandy loam
38 to 65 inches—very pale brown very gravelly loamy sand and variegated very gravelly loamy coarse sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate in the upper part and very rapid in the lower part
Available water capacity: 4.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight

Characteristics of Tirod

Position on landscape: Smooth or concave slopes
Typical profile:
0 to 18 inches—grayish brown silt loam
18 to 30 inches—light brownish gray loam
30 to 40 inches—pale brown clay loam
40 to 62 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight

Minor Components

- Arbone soils on convex slopes near the edges of areas of this unit (10 percent)
- Highcreek soils on terrace breaks (5 percent)
- Soils that have slopes of more than 2 percent (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland and building site development
Major management factors: Rock fragments on the surface in some areas and available water capacity in some areas

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Rock fragments on the surface make seedbed preparation difficult.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system to adequately control irrigation water and to minimize water erosion, managing nutrients, and maintaining plant vigor are needed.

Building site development
General management consideration:
- Onsite investigation is needed to determine whether the area considered for a septic tank absorption field is underlain by unsuitable material. If such material is present, consider placing absorption lines below it.

Interpretive Groups

Land capability classification: Bingham—3s, irrigated, and 6s, nonirrigated;
Tirod—2c, irrigated, and 3c, nonirrigated

11—Bloor-Brinnum complex, 0 to 2 percent slopes

Composition

Bloor and similar soils—50 percent
Brinnum and similar soils—35 percent
Minor components—15 percent

Setting

Landform: Lake plains and flood plains
Elevation: 4,300 to 4,500
Climatic data (mean annual):
Precipitation—about 11 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Bloor

Position on landscape: Slightly convex slopes
Typical profile:
0 to 12 inches—light brownish gray and light gray silt loam
12 to 20 inches—brown silt loam
20 to 29 inches—very pale brown silt loam
29 to 47 inches—pale yellow and light gray very fine sandy loam and fine sandy loam
47 to 60 inches—pale yellow silt loam
Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—none or slight
Depth to water table: 60 to 72 inches in January through May

Characteristics of Brinnum

Position on landscape: Concave slopes

Typical profile:
0 to 9 inches—light brownish gray silt loam
9 to 31 inches—very pale brown and light brownish gray silt loam
31 to 60 inches—pale yellow silty clay loam
Depth class: Very deep
Drainage class: Very poorly drained
Permeability: Moderately slow
Available water capacity: 5.7 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—6 to 18 inches
Runoff: Very low
Hazard of erosion: By water—none or slight
Depth to water table: 6 to 18 inches in September through May
Frequency of flooding: Occasional

Minor Components

- Logan soils in depressions (10 percent)
- Saline and sodic soils that are in concave slickspots and have a layer of clay accumulation at or near the surface (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Salinity, sodicity, wetness, and flooding in some areas
Dominant vegetation in natural potential plant community: Bloor—shadscale and bottlebrush squirreltail; Brinnum—black greasewood and alkali sacaton
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the salinity, sodicity, and wetness.
- Periodic flooding on the Brinnum soil increases the amount of moisture available for plants and thus increases the amount of forage produced.

Interpretive Groups

Land capability classification: Bloor—7s, nonirrigated; Brinnum—5w, nonirrigated
Ecological site: Bloor—Alkali Flats, 8- to 12-inch precipitation zone; Brinnum—Semiwet Saline Meadow

12—Bothwell silt loam, 0 to 2 percent slopes

Composition

Bothwell and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Lake terraces
Elevation: 4,900 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Bothwell

Typical profile:
0 to 9 inches—brown silt loam

9 to 20 inches—grayish brown silt loam
20 to 45 inches—brown silty clay loam
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Buckboard soils on slightly higher lying lake terraces (10 percent)
- Elevator soils on low lake terraces (5 percent)
- Jensen soils on slightly higher lying lake terraces (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factor: Growing season

Nonirrigated cropland
Suitable crops: Wheat and barley
General management consideration:
- The short growing season limits the choice of crops.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3c, nonirrigated

13—Bothwell-Hades-Justesen complex, 6 to 25 percent slopes

Composition

Bothwell and similar soils—35 percent
Hades and similar soils—30 percent
Justesen and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,800 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—75 to 100 days

Characteristics of Bothwell

Position on landscape: Northeast- or east-facing, concave slopes

Typical profile:
0 to 9 inches—grayish brown silt loam
9 to 20 inches—dark grayish brown silt loam
20 to 45 inches—dark grayish brown and grayish brown silty clay loam
45 to 60 inches—yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Hades

Position on landscape: East-facing, concave slopes
Typical profile:
0 to 20 inches—dark grayish brown and grayish brown silt loam
20 to 42 inches—brown silty clay loam
42 to 60 inches—yellowish brown gravelly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Justesen

Position on landscape: Convex slopes
Typical profile:
0 to 8 inches—grayish brown silt loam
8 to 16 inches—grayish brown silt loam
16 to 27 inches—brown silty clay loam
27 to 45 inches—light brown silt loam
45 to 60 inches—very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Hondoho soils on convex slopes and ridges (5 percent)
- Yago soils in convex, south-facing depressions (5 percent)
- Soils that have slopes of less than 6 percent or more than 25 percent (3 percent)
- Rexburg soils on convex slopes (2 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland
Major management factors: Growing season, water erosion, and slope

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley

General management considerations:
- The most suitable irrigation method is a sprinkler system.
- The short growing season limits the choice of crops.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the rangeland is limited by water erosion.

Interpretive Groups

Land capability classification: Bothwell, Hades, and Justesen—6e, irrigated, and 4e, nonirrigated
Ecological site: Bothwell and Hades—Loamy, 16- to 22-inch precipitation zone; Justesen—Loamy, 13- to 16-inch precipitation zone

14—Brinnum-Logan-Langless complex, 0 to 2 percent slopes

Composition

Brinnum and similar soils—30 percent
Logan and similar soils—30 percent
Langless and similar soils—25 percent
Minor components—15 percent

Setting

Landform: Flood plains, lake terraces, and lake plains
Elevation: 4,300 to 4,700 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 130 days

Characteristics of Brinnum

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 9 inches—light brownish gray silt loam
9 to 31 inches—very pale brown and light brownish gray silt loam
31 to 60 inches—pale yellow silty clay loam
Depth class: Very deep

Drainage class: Very poorly drained
Permeability: Moderately slow
Available water capacity: 5.7 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—6 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: 6 to 18 inches in September through May
Frequency of flooding: Occasional

Characteristics of Logan

Position on landscape: Smooth slopes
Typical profile:
0 to 4 inches—slightly decomposed plant material
4 to 22 inches—gray silt loam
22 to 64 inches—gray and light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderately slow
Available water capacity: 13.8 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—0 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate
Depth to seasonal high water table: At the surface to a depth of 18 inches below the surface in March through July
Frequency of flooding: Rare

Characteristics of Langless

Position on landscape: Smooth slopes
Typical profile:
0 to 3 inches—slightly decomposed plant material
3 to 9 inches—dark gray silt loam
9 to 47 inches—gray, white, and very pale brown silt loam
47 to 63 inches—light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Available water capacity: 11 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—12 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: 12 to 18 inches in October through June
Frequency of flooding: Frequent

Minor Components

- Bloor soils near old oxbows (10 percent)
- Fridlo soils on slightly higher lying, raised mounds (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated pastureland, and rangeland
Major management factors: Salinity, wetness, and flooding

Irrigated and nonirrigated pastureland

Suitable crops: Water-tolerant grasses

General management considerations:

- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system should be used.
- The seasonal high water table provides supplemental moisture for plants.

Rangeland

Dominant vegetation in natural potential plant community: Brinnum—black greasewood and alkali sacaton; Logan and Langless—sedges and tufted hairgrass

General management considerations:

- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the salinity and wetness.
- Periodic flooding increases the amount of moisture available for plants and thus increases the amount of forage produced.
- Seeding of adapted species to improve the range is limited by wetness.

Interpretive Groups

Land capability classification: 5w, irrigated and nonirrigated

Ecological site: Brinnum—Semiwet Saline Meadow; Logan and Langless—Wet Meadow

15—Buckboard loam, 0 to 2 percent slopes

Composition

Buckboard and similar soils—80 percent

Minor components—20 percent

Setting

Landform: Lake terraces

Elevation: 4,900 to 5,200 feet

Climatic data (mean annual):

Precipitation—about 16 inches

Air temperature—about 43 degrees F

Frost-free season—80 to 100 days

Characteristics of Buckboard

Typical profile:

0 to 15 inches—grayish brown loam

15 to 50 inches—brown, light brownish gray, and pale brown loam

50 to 65 inches—pale brown and light gray loam

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately slow

Available water capacity: 11.5 inches

Potential rooting depth: 60 inches or more

Runoff: Low

Hazard of erosion: By water—none or slight

Minor Components

- Bothwell soils on slightly higher lying terrace slopes (10 percent)
- Elevator soils on low terrace slopes (10 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factor: Growing season

Nonirrigated cropland
Suitable crops: Wheat and barley
General management consideration:
- The short growing season limits the choice of crops.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3c, nonirrigated

16—Buist gravelly silt loam, 20 to 30 percent slopes

Composition

Buist and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants and mountains
Elevation: 5,000 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 42 degrees F
Frost-free period—85 to 95 days

Characteristics of Buist

Typical profile:
0 to 15 inches—brown gravelly silt loam
15 to 28 inches—very pale brown very gravelly loam
28 to 60 inches—very pale brown extremely gravelly fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on convex slopes (3 percent)
- Hondoho soils on concave slopes (5 percent)
- Kucera soils on concave terraces (10 percent)
- Rock outcrop on shoulder slopes (2 percent)

- Soils that have slopes of less than 20 percent or more than 30 percent (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity, and water erosion
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by rock fragments on the surface and water erosion.
- Production is limited mainly by the restricted available water capacity.
- Use of equipment is limited by the rock fragments on the surface.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Loamy, 12- to 16-inch precipitation zone

17—Calpac-Ridgecrest-Ireland association, 40 to 70 percent slopes

Composition

Calpac and similar soils—30 percent
Ridgecrest and similar soils—30 percent
Ireland and similar soils—25 percent
Minor components—15 percent

Setting

Landform: Mountains
Elevation: 5,200 to 7,200 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 42 degrees F
Frost-free period—70 to 90 days

Characteristics of Calpac

Position on landscape: Concave slopes
Typical profile:
0 to 8 inches—dark brown gravelly silt loam
8 to 15 inches—dark brown very gravelly silt loam
15 to 23 inches—brown extremely cobbly silt loam
23 to 60 inches—brown extremely cobbly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Ridgecrest

Position on landscape: Convex slopes

Typical profile:
0 to 9 inches—grayish brown very gravelly silt loam
9 to 13 inches—grayish brown very cobbly silt loam
13 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly loam
31 to 35 inches—very pale brown extremely cobbly sandy loam
35 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 3.6 inches
Potential rooting depth: 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Ireland

Position on landscape: North- and east-facing, convex slopes
Typical profile:
0 to 8 inches—grayish brown very gravelly silt loam
8 to 28 inches—grayish brown and brown extremely cobbly silt loam
28 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 2 inches
Potential rooting depth: 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hymas soils on convex ridges (3 percent)
- Northwater soils in depressions (3 percent)
- Soils that have slopes of less than 40 percent (3 percent)
- Hondoho soils on slightly convex slopes and ridges (2 percent)
- Pavohroo soils in depressions (2 percent)
- Small areas of Rock outcrop near ridgetops (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, water erosion, and slope.
- Uniform grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

18—Cedarhill gravelly silt loam, 4 to 12 percent slopes

Composition

Cedarhill and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 44 degrees F
Frost-free period—90 to 100 days

Characteristics of Cedarhill

Typical profile:
0 to 7 inches—grayish brown gravelly silt loam
7 to 12 inches—grayish brown gravelly loam
12 to 27 inches—light brownish gray very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Darkbull soils on south-facing backslopes (5 percent)
- Raldridge soils in depressions (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, nonirrigated hayland, and rangeland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface, available water capacity, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface and constructing terraces, diversions, and grassed waterways.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Rangeland

Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management considerations:

- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the restricted available water capacity.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Gravelly Loam, 16- to 22-inch precipitation zone

19—Cedarhill gravelly silt loam, 12 to 30 percent slopes

Composition

Cedarhill and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants and plains
Elevation: 5,000 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—90 to 100 days

Characteristics of Cedarhill

Typical profile:
0 to 7 inches—grayish brown gravelly silt loam
7 to 12 inches—grayish brown gravelly loam
12 to 27 inches—light brownish gray very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on convex slopes (5 percent)
- Hondoho soils on convex slopes (5 percent)
- Ririe soils on backslopes (10 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface, available water capacity, water erosion, and slope

Nonirrigated cropland
Suitable crop: Wheat
General management considerations:
- The short growing season limits the choice of crops.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface and farming across the slope.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by rock fragments on the surface and water erosion.
- Production is limited mainly by the restricted available water capacity.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Gravelly Loam, 16- to 22-inch precipitation zone

20—Cedarhill-Hymas association, 20 to 55 percent slopes

Composition

Cedarhill and similar soils—45 percent
Hymas and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Mountains and ridges
Elevation: 5,000 to 7,500 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—about 95 days

Characteristics of Cedarhill

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 7 inches—grayish brown gravelly silt loam
7 to 12 inches—grayish brown gravelly loam
12 to 27 inches—light brownish gray very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hymas

Position on landscape: West-facing slopes
Typical profile:
 0 to 2 inches—grayish brown very cobbly loam
 2 to 7 inches—brown very cobbly silt loam
 7 to 11 inches—pale brown extremely cobbly loam
 11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Soils in swales that have less than 35 percent rock fragments in the subsoil and have a dark-colored surface layer that is more than 16 inches thick (10 percent)
- Soils near smooth or concave slopes that have more than 35 percent rock fragments in the subsoil and have a dark-colored surface layer that is more than 20 inches thick (10 percent)
- Soils that have slopes of less than 20 percent or more than 55 percent (3 percent)
- Rock outcrop on shoulders (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Cedarhill—mountain big sagebrush and bluebunch wheatgrass; Hymas—low sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, available water capacity, and slope.
- Production is limited mainly by the depth to bedrock and the restricted available water capacity.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Cedarhill—6e, nonirrigated; Hymas—6s, nonirrigated
Ecological site: Cedarhill—Gravelly Loam, 16- to 22-inch precipitation zone; Hymas—Shallow Stony, 12- to 16-inch precipitation zone

21—Cedarhill-Lostine complex, 12 to 30 percent slopes

Composition

Cedarhill and similar soils—40 percent
Lostine and similar soils—40 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 5,300 to 6,500 feet

Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Cedarhill

Position on landscape: Convex slopes
Typical profile:
0 to 7 inches—grayish brown gravelly silt loam
7 to 12 inches—grayish brown gravelly loam
12 to 27 inches—light brownish gray very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Lostine

Position on landscape: Concave or slightly convex slopes
Typical profile:
0 to 7 inches—dark grayish brown silt loam
7 to 45 inches—brown silt loam
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 11.1 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Ririe soils on smooth slopes (10 percent)
- Hondoho soils on convex slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates in some areas, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crop: Wheat
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by chiseling stubble fields on

the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Rangeland

Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management considerations:

- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas and water erosion.
- Production is limited mainly by the restricted available water capacity in some areas.

Interpretive Groups

Land capability classification: 4e, nonirrigated

Ecological site: Cedarhill—Gravelly Loam, 16- to 22-inch precipitation zone; Lostine—Loamy, 13- to 16-inch precipitation zone

22—Collinston silt loam, 0 to 2 percent slopes

Composition

Collinston and similar soils—85 percent

Minor components—15 percent

Setting

Landform: Lake terraces

Elevation: 4,500 to 5,500 feet

Climatic data (mean annual):

Precipitation—about 15 inches

Air temperature—about 47 degrees F

Frost-free period—100 to 110 days

Characteristics of Collinston

Typical profile:

0 to 12 inches—grayish brown silt loam

12 to 20 inches—brown silt loam

20 to 60 inches—very pale brown silt loam

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately slow

Available water capacity: 12 inches

Potential rooting depth: 60 inches or more

Runoff: Negligible to low

Hazard of erosion: By water—none or slight

Minor Components

- Kearns soils on smooth slopes (5 percent)
- Lagonot soils in depressions near terrace risers (5 percent)
- Wheelon soils on terrace risers (5 percent)

Use and Management

Major use: Nonirrigated cropland

Major management factor: Depth to carbonates

Suitable crops: Wheat and barley

General management consideration:
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Interpretive Groups

Land capability classification: 3c, nonirrigated

23—Collinston-Kearns complex, 2 to 12 percent slopes

Composition

Collinston and similar soils—45 percent
Kearns and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,500 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 48 degrees F
  Frost-free period—100 to 120 days

Characteristics of Collinston

Position on landscape: Slightly convex or smooth slopes
Typical profile:
  0 to 12 inches—grayish brown silt loam
  12 to 20 inches—brown silt loam
  20 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Kearns

Position on landscape: Concave slopes
Typical profile:
  0 to 8 inches—grayish brown silt loam
  8 to 32 inches—light brownish gray and pale brown silt loam
  32 to 67 inches—very pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Wheelon soils on convex shoulders (10 percent)
- Soils on concave slopes that have a dark-colored surface layer that is more than

20 inches thick and have more than 18 percent clay in the subsoil (10 percent)
- Soils in depressions that have more than 35 percent rock fragments in the subsoil (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Depth to carbonates, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, constructing terraces, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: Collinston—3e, nonirrigated; Kearns—4e, nonirrigated

24—Copenhagen-Lonigan-Manila association, 12 to 50 percent slopes

Composition

Copenhagen and similar soils—35 percent
Lonigan and similar soils—30 percent
Manila and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Mountains and ridges
Elevation: 4,800 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 95 days

Characteristics of Copenhagen

Position on landscape: Convex slopes
Typical profile:
0 to 6 inches—gray very channery loam
6 to 14 inches—gray very channery loam
14 inches—consolidated tuff
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.4 inches
Restriction to rooting depth: Consolidated tuff at a depth of 10 to 20 inches
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Lonigan

Position on landscape: Slightly concave slopes

Typical profile:
0 to 11 inches—grayish brown very fine sandy loam
11 to 16 inches—light brownish gray very gravelly loam
16 to 33 inches—very pale brown and white very gravelly loam
33 inches—weathered tuff
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.5 inches
Restriction to rooting depth: Weathered tuff at a depth of 20 to 40 inches
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Manila

Position on landscape: Concave slopes
Typical profile:
0 to 5 inches—dark grayish brown silt loam
5 to 19 inches—grayish brown silty clay loam
19 to 45 inches—yellowish brown silty clay
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Buckboard soils that are on south- and west-facing slopes and have more than 35 percent rock fragments in the subsoil (5 percent)
- Pavohroo soils on north- and east-facing slopes (5 percent)
- Calpac soils and areas of Rock outcrop (5 percent)
- Soils that are on ridges in areas east of Dairy Creek and are similar to the Lonigan soil but have consolidated tuff at a depth of more than 40 inches

Use and Management

Major use: Rangeland
Major management factors: Depth to consolidated tuff in some areas, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the depth to consolidated tuff in some areas and the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Copenhagen—7e, nonirrigated; Lonigan and Manila—6e, nonirrigated

Ecological site: Copenhagen—Shallow Loamy, 13- to 16-inch precipitation zone; Lonigan—Ashy Loam, 13- to 16-inch precipitation zone; Manila—Loamy, 16- to 22-inch precipitation zone

25—Darkbull-Pyrat-Ecur complex, 2 to 30 percent slopes

Composition

Darkbull and similar soils—40 percent
Pyrat and similar soils—30 percent
Ecur and similar soils—25 percent
Minor components—5 percent

Setting

Landform: Fan remnants and lake terraces
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 11 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Darkbull

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 10 inches—light brownish gray and pale brown gravelly loam
10 to 60 inches—pale brown very gravelly sandy loam and variegated extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate in the upper part and very rapid in the lower part
Available water capacity: 7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Pyrat

Position on landscape: Slightly concave slopes
Typical profile:
0 to 14 inches—pale brown gravelly silt loam
14 to 25 inches—pale brown and very pale brown very gravelly sandy loam
25 to 33 inches—light gray extremely gravelly sandy loam
33 to 43 inches—very pale brown extremely gravelly sandy loam
43 to 65 inches—very pale brown extremely gravelly loamy sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate in the upper part and very rapid in the lower part
Available water capacity: 4.5 inches
Potential rooting depth: Somewhat restricted at a depth of 25 inches
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Ecur

Position on landscape: Convex slopes
Typical profile:
0 to 15 inches—light brownish gray fine sandy loam
15 to 37 inches—light gray fine sandy loam
37 to 60 inches—light gray loamy fine sand and pale yellow gravelly loamy fine sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 6.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—severe; by wind—severe

Minor Components

- Raldridge soils in concave areas (3 percent)
- Bayhook soils on convex, low terraces (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface in some areas, available water capacity in some areas, wind erosion, and water erosion
Dominant vegetation in natural potential plant community: Darkbull and Ecur—basin big sagebrush and bluebunch wheatgrass; Pyrat—black sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas, wind erosion, and water erosion.
- Production is limited mainly by the low precipitation during the growing season and the restricted available water capacity in some areas.
- After seeding, defer grazing until young plants are well established.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Darkbull and Ecur—Loamy, 11- to 13-inch precipitation zone; Pyrat—Limestone Gravelly, 12- to 16-inch precipitation zone

26—DeJarnet gravelly silt loam, 0 to 4 percent slopes

Composition

DeJarnet and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,900 to 5,100 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 48 degrees F
Frost-free period—120 to 130 days

Characteristics of DeJarnet

Typical profile:
- 0 to 3 inches—grayish brown gravelly silt loam
- 3 to 27 inches—grayish brown and brown gravelly silt loam
- 27 to 41 inches—pale brown very gravelly loam
- 41 to 62 inches—light gray extremely gravelly loamy fine sand

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.6 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Neeley soils on convex slopes (2 percent)
- Kearns soils on concave slopes (3 percent)
- Soils that are in depressions and have less than 35 percent rock fragments in the subsoil (3 percent)
- Soils that have slopes of more than 4 percent (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Rock fragments on the surface and available water capacity

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous cropping is not suitable because of the limited precipitation.
- Rock fragments on the surface make seedbed preparation difficult.
- Conserve moisture by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the low precipitation during the growing season and the restricted available water capacity.

Interpretive Groups

Land capability classification: 3c, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

27—Dumps, mine

This unit is in the mountainous area north of Malad City. It consists of open pits from which pumice is excavated and trucked to Malad City for packaging and transport. The material is used in making filters, potting soil filler, paint coloring, and cleansers. The floor of the pits is dominantly consolidated pumice. This unit has very little potential for producing vegetation. The land capability classification is 8.

28—Ecur fine sandy loam, 0 to 4 percent slopes

Composition

Ecur and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 12 inches
Air temperature—about 47 degrees F
Frost-free season—100 to 110 days

Characteristics of Ecur

Typical profile:
0 to 15 inches—light brownish gray fine sandy loam
15 to 37 inches—light gray fine sandy loam
37 to 60 inches—light gray loamy fine sand and pale yellow gravelly loamy fine sand and loamy fine sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 6.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very low
Hazard of erosion: By water—slight; by wind—severe

Minor Components

- Bayhook soils on convex slopes (3 percent)
- Darkbull soils on backslopes (5 percent)
- Pyrat soils on convex slopes (5 percent)
- Soils that have slopes of more than 4 percent (2 percent)

Use and Management

Major uses: Rangeland and irrigated cropland
Major management factors: Wind erosion

Rangeland

Dominant vegetation in natural potential plant community: Utah juniper, basin big sagebrush, and Indian ricegrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season and by wind erosion.
- Production is limited mainly by the low precipitation during the growing season.

Irrigated cropland

Suitable crop: Barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

- Minimize the risk of erosion and conserve moisture by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 2e, irrigated, and 6c, nonirrigated
Ecological site: Sandy, 8- to 12-inch precipitation zone

29—Ecur-Darkbull complex, 1 to 8 percent slopes

Composition

Ecur and similar soils—45 percent
Darkbull and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
    Precipitation—about 11 inches
    Air temperature—about 47 degrees F
    Frost-free period—100 to 120 days

Characteristics of Ecur

Position on landscape: Convex slopes
Typical profile:
    0 to 15 inches—light brownish gray fine sandy loam
    15 to 37 inches—light gray fine sandy loam
    37 to 60 inches—light gray loamy fine sand and pale yellow gravelly loamy fine sand and loamy fine sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 6.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—moderate; by wind—severe

Characteristics of Darkbull

Position on landscape: Smooth or slightly convex slopes
Typical profile:
    0 to 10 inches—light brownish gray and pale brown gravelly loam
    10 to 60 inches—pale brown very gravelly sandy loam and variegated extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate in the upper part and very rapid in the lower part
Available water capacity: 7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Lanoak soils on concave slopes and in depressions (10 percent)
- Bayhook soils on convex, lower lying terraces (10 percent)
- Soils that have slopes of more than 8 percent (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and wind erosion in some areas
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and wind erosion in some areas.
- Production is limited mainly by the low precipitation during the growing season and the restricted available water capacity in some areas.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

30—Elevator silt loam, 0 to 4 percent slopes

Composition

Elevator and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Lake terraces
Elevation: 4,900 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Elevator

Typical profile:
0 to 10 inches—brown silt loam
10 to 32 inches—brown and pale brown silty clay loam
32 to 60 inches—light gray silty clay loam
Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight
Depth to seasonal high water table: 60 to 72 inches in March through May

Minor Components

- Manila soils on convex slopes (10 percent)
- Bothwell soils on slightly higher lying terrace slopes (5 percent)
- Jensen soils in depressions and on concave slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season and permeability

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Increase the water intake rate by regularly adding organic matter, chiseling stubble fields on the contour or across the slope in fall, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3c, nonirrigated

31—Elevator-Jensen complex, 0 to 4 percent slopes

Composition

Elevator and similar soils—40 percent
Jensen and similar soils—35 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,900 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Elevator

Position on landscape: Smooth slopes
Typical profile:
0 to 10 inches—brown silt loam
10 to 32 inches—brown and pale brown silty clay loam
32 to 60 inches—light gray silty clay loam
Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: Low

Hazard of erosion: By water—slight
Depth to seasonal high water table: 60 to 72 inches in March through May

Characteristics of Jensen

Position on landscape: Smooth or slightly convex slopes
Typical profile:
  0 to 12 inches—grayish brown silt loam
  12 to 45 inches—brown and pale brown gravelly silt loam
  45 to 60 inches—pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Hondoho soils in depressions (10 percent)
- Bothwell soils on low lake terraces (10 percent)
- Soils that have slopes of more than 4 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season and permeability in some areas

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Increase the water intake rate by regularly adding organic matter, chiseling stubble fields on the contour or across the slope in fall, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 3c, nonirrigated

32—Elevator-Jensen complex, 4 to 12 percent slopes

Composition

Elevator and similar soils—40 percent
Jensen and similar soils—35 percent
Minor components—25 percent

Setting

Landform: Lake terraces (fig. 1)
Elevation: 4,900 to 5,900 feet
Climatic data (mean annual):
  Precipitation—about 16 inches
  Air temperature—about 43 degrees F
  Frost-free period—80 to 100 days

Characteristics of Elevator

Position on landscape: Smooth slopes

Figure 1.—Typical area of Elevator-Jensen complex, 4 to 12 percent slopes. Elevator silt loam is in foreground, and Jensen silt loam is in draws. Pocatello Valley is in background.

Typical profile:
- 0 to 10 inches—brown silt loam
- 10 to 32 inches—brown and pale brown silty clay loam
- 32 to 60 inches—light gray silty clay loam

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate
Depth to seasonal high water table: 60 to 72 inches in March through May

Characteristics of Jensen

Position on landscape: Smooth or slightly convex slopes
Typical profile:
- 0 to 12 inches—grayish brown silt loam
- 12 to 45 inches—brown and pale brown gravelly silt loam
- 45 to 60 inches—pale brown very gravelly loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Hondoho soils in depressions (10 percent)
- Bothwell soils on low lake terraces (5 percent)
- Manila soils on smooth or concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability in some areas, and water erosion

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Increase the water intake rate and reduce the risk of erosion by regularly adding organic matter, chiseling stubble fields on the contour or across the slope in fall, limiting the number of tillage operations, and constructing terraces.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 12- to 16-inch precipitation zone

33—Fridlo silt loam, 0 to 2 percent slopes

Composition

Fridlo and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,300 to 4,500 feet
Climatic data (mean annual):
Precipitation—about 12 inches
Air temperature—about 48 degrees F
Frost-free season—120 to 130 days

Characteristics of Fridlo

Typical profile:
0 to 7 inches—dark grayish brown and grayish brown silt loam
7 to 24 inches—grayish brown and pale brown silty clay loam
24 to 39 inches—very pale brown and light gray silty clay loam
39 to 60 inches—white silt loam
Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Depth to seasonal high water table: 39 to 72 inches in April through June
Hazard of erosion: By water—none or slight

Minor Components

- Goosenawt soils on slightly lower lying, concave slopes (5 percent)
- Kearns soils on slightly lower lying terraces (10 percent)
- Parleys soils on smooth terraces (10 percent)

Use and Management

Major uses: Irrigated cropland and hayland
Major management factors: Permeability, depth to carbonates, salinity, and sodicity

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Conserve moisture and increase the water intake rate by regularly adding organic matter and limiting the number of tillage operations.
- An unfavorable calcium-to-magnesium ratio limits the growth of many plants.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 4s, irrigated, and 6s, nonirrigated

34—Goosenawt gravelly loam, 0 to 2 percent slopes

Composition

Goosenawt and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Flood plains
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 47 degrees F
Frost-free season—110 to 130 days

Characteristics of Goosenawt

Typical profile:
0 to 24 inches—gray and dark gray gravelly loam
24 to 58 inches—dark gray and very dark gray clay loam
58 to 74 inches—light brownish gray silt loam and pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow

Available water capacity: 12.5 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight
Frequency of flooding: Rare

Minor Components

- Kearns soils on smooth terraces (5 percent)
- Parleys soils on slightly convex to smooth slopes (5 percent)
- Soils that are in depressions and have a seasonal high water table at the surface to a depth of 18 inches below the surface in spring (5 percent)
- Tirod soils on smooth to concave slopes (10 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Few limitations

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

35—Hans silt loam, 0 to 2 percent slopes

Composition

Hans and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 4,900 feet
Climatic data (mean annual):
  Precipitation—about 14 inches
  Air temperature—about 47 degrees F
  Frost-free season—120 to 130 days

Characteristics of Hans

Typical profile:
  0 to 10 inches—light brownish gray silt loam
  10 to 26 inches—light brownish gray silty clay loam
  26 to 60 inches—light brownish gray and light gray silty clay loam
Depth class: Very deep

Drainage class: Well drained
Permeability: Slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight

Minor Components

- Fridlo soils on concave low lake terraces (10 percent)
- Kearns soils on low terraces (5 percent)
- Parleys soils on smooth terraces (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Permeability and depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- This unit is well suited to crops, except the areas east of Samaria that have a high content of salt and a seasonal high water table.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Increase the water intake rate by maintaining crop residue on the soil surface and limiting the number of tillage operations.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2e, irrigated, and 3c, nonirrigated

36—Highcreek-Sterling complex, 4 to 12 percent slopes

Composition

Highcreek and similar soils—45 percent
Sterling and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Lake terraces and fan remnants
Elevation: 4,500 to 5,500 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Highcreek

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 7 inches—grayish brown silt loam
7 to 26 inches—brown and light brownish gray silt loam
26 to 66 inches—very pale brown and pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Sterling

Position on landscape: Concave slopes
Typical profile:
0 to 13 inches—brown very gravelly loam
13 to 66 inches—pale brown and very pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Samaria soils on convex slopes (10 percent)
- Lizdale soils on eroded, steep slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)
- Tirod soils on smooth slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Depth to carbonates, rock fragments on the surface in some areas, and water erosion

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous cropping is not suitable because of the limited precipitation.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on or near the surface of the soil limit tillage and make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface, constructing terraces, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass

General management considerations:
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season, rock fragments on the surface in some areas, and water erosion.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: Highcreek—4e, nonirrigated; Sterling—3e, nonirrigated
Ecological site: Highcreek—Loamy, 11- to 13-inch precipitation zone; Sterling—Loamy, 12- to 16-inch precipitation zone

37—Highcreek-Sterling complex, 12 to 25 percent slopes

Composition

Highcreek and similar soils—40 percent
Sterling and similar soils—35 percent
Minor components—25 percent

Setting

Landform: Lake terraces and fan remnants
Elevation: 4,500 to 5,500 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Highcreek

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 7 inches—grayish brown silt loam
7 to 26 inches—brown and light brownish gray silt loam
26 to 66 inches—very pale brown and pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Sterling

Position on landscape: Concave slopes
Typical profile:
0 to 13 inches—brown very gravelly loam
13 to 66 inches—pale brown and very pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Samaria soils on convex slopes (10 percent)
- Lizdale soils on eroded, steep slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 25 percent (5 percent)
- Bingham soils on smooth slopes (3 percent)
- Tirod soils on smooth slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Depth to carbonates, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous cropping is not suitable because of the limited precipitation.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface, farming across the slope, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season, rock fragments on the surface in some areas, and water erosion.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: Highcreek—6e, nonirrigated; Sterling—3e, nonirrigated
Ecological site: Highcreek—Loamy, 11- to 13-inch precipitation zone; Sterling—Loamy, 12- to 16-inch precipitation zone

38—Hillfield-Kucera complex, 4 to 30 percent slopes

Composition

Hillfield and similar soils—50 percent
Kucera and similar soils—30 percent
Minor components—20 percent

Setting

Landform: Dissected lake terraces
Elevation: 4,400 to 5,300 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 46 degrees F
Frost-free period—90 to 120 days

Characteristics of Hillfield

Position on landscape: Convex slopes
Typical profile:
  0 to 7 inches—light gray silt loam
  7 to 16 inches—light gray silt loam
  16 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 11.1 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Kucera

Position on landscape: Concave slopes
Typical profile:
  0 to 22 inches—dark grayish brown and brown silt loam
  22 to 42 inches—pale brown silt loam
  42 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Samaria soils on convex slopes (10 percent)
- Hans soils on concave slopes (5 percent)
- Raldridge soils on concave slopes (3 percent)
- Small areas of soils that have slopes of less than 4 percent or more than 30 percent (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.

- Seeding of adapted species to improve the range is limited by water erosion.

Interpretive Groups

Land capability classification: Hillfield—6e, nonirrigated; Kucera—4e, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

39—Hillfield-Kucera complex, 30 to 50 percent slopes

Composition

Hillfield and similar soils—65 percent
Kucera and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Dissected lake terraces
Elevation: 4,400 to 5,300 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 46 degrees F
Frost-free period—90 to 120 days

Characteristics of Hillfield

Position on landscape: Convex slopes
Typical profile:
0 to 7 inches—light gray silt loam
7 to 16 inches—light gray silt loam
16 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 11.1 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Kucera

Position on landscape: Concave slopes
Typical profile:
0 to 22 inches—dark grayish brown and brown silt loam
22 to 42 inches—pale brown silt loam
42 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Samaria soils on convex slopes (5 percent)
- Raldridge soils on concave slopes (5 percent)
- Hans soils on concave slopes (3 percent)

- Soils that have slopes of less than 30 percent (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Water erosion and slope
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

40—Hondoho-Calpac-Lizdale association, 30 to 70 percent slopes

Composition

Hondoho and similar soils—35 percent
Calpac and similar soils—20 percent
Lizdale and similar soils—20 percent
Minor components—25 percent

Setting

Landform: Mountains
Elevation: 4,800 to 7,200 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Hondoho

Position on landscape: North- and east-facing, convex slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 28 inches—pale brown very cobbly loam
28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Calpac

Position on landscape: East-facing, concave slopes
Typical profile:
0 to 8 inches—dark brown gravelly silt loam
8 to 15 inches—dark brown very gravelly silt loam
15 to 23 inches—brown extremely cobbly silt loam
23 to 60 inches—brown extremely cobbly silt loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Lizdale

Position on landscape: South-facing slopes
Typical profile:
0 to 7 inches—dark grayish brown very gravelly silt loam
7 to 36 inches—brown very gravelly loam and pink very gravelly sandy loam
36 to 60 inches—light brown extremely gravelly sandy loam and extremely gravelly loamy sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Hymas soils on ridges (5 percent)
- Povey soils on concave slopes (5 percent)
- Ridgecrest soils on convex toeslopes (5 percent)
- Rock outcrop on shoulders (5 percent)
- Soils that have slopes of less than 30 percent (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

41—Hondoho-Hymas-Pavohroo association, 12 to 30 percent slopes

Composition

Hondoho and similar soils—35 percent
Hymas and similar soils—25 percent

Pavohroo and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Mountains and ridges
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
  Precipitation—about 18 inches
  Air temperature—about 43 degrees F
  Frost-free period—40 to 100 days

Characteristics of Hondoho

Position on landscape: Convex slopes
Typical profile:
  0 to 14 inches—grayish brown gravelly silt loam
  14 to 28 inches—pale brown very cobbly loam
  28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Hymas

Position on landscape: Smooth or convex slopes
Typical profile:
  0 to 2 inches—grayish brown very cobbly loam
  2 to 7 inches—brown very cobbly silt loam
  7 to 11 inches—pale brown extremely cobbly loam
  11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Pavohroo

Position on landscape: Northeast-facing, concave slopes
Typical profile:
  0 to 1 inch—slightly decomposed plant material
  1 to 7 inches—dark brown gravelly silt loam
  7 to 16 inches—brown silt loam
  16 to 39 inches—brown and light yellowish brown gravelly silt loam
  39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more

Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Calpac soils on concave slopes (5 percent)
- Ridgecrest soils on convex slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)
- Rock outcrop on shoulders (3 percent)
- Povey soils on convex slopes (2 percent)

Use and Management

Major uses: Rangeland and nonirrigated cropland
Major management factors: Growing season, depth to bedrock in some areas, rock fragments on the surface, available water capacity in some areas, water erosion, and slope

Rangeland
Dominant vegetation in natural potential plant community: Hondoho—mountain big sagebrush and bluebunch wheatgrass; Hymas—low sagebrush and bluebunch wheatgrass; Pavohroo—quaking aspen
General management considerations:
- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas and rock fragments on the surface.
- Production is limited mainly by the restricted available water capacity in some areas.

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface, farming across the slope, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: Hondoho and Pavohroo—4e, nonirrigated; Hymas—6s, nonirrigated
Ecological site: Hondoho—Steep Slope, 16- to 22-inch precipitation zone; Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone

42—Hondoho-Hymas-Pavohroo association, 30 to 60 percent slopes

Composition

Hondoho and similar soils—35 percent
Hymas and similar soils—25 percent
Pavohroo and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Mountains and ridges
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
  Precipitation—about 18 inches
  Air temperature—about 43 degrees F
  Frost-free period—40 to 100 days

Characteristics of Hondoho

Position on landscape: Convex slopes
Typical profile:
  0 to 14 inches—grayish brown gravelly silt loam
  14 to 28 inches—pale brown very cobbly loam
  28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hymas

Position on landscape: Smooth or convex slopes
Typical profile:
  0 to 2 inches—grayish brown very cobbly loam
  2 to 7 inches—brown very cobbly silt loam
  7 to 11 inches—pale brown extremely cobbly loam
  11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Pavohroo

Position on landscape: Northeast-facing, concave slopes
Typical profile:
  0 to 1 inch—slightly decomposed plant material
  1 to 7 inches—dark brown gravelly silt loam
  7 to 16 inches—brown silt loam
  16 to 39 inches—brown and light yellowish brown gravelly silt loam
  39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Calpac soils on concave slopes (5 percent)
- Ridgecrest soils on convex slopes (5 percent)
- Soils that have slopes of less than 30 percent (5 percent)
- Rock outcrop on shoulders (3 percent)
- Povey soils on convex slopes (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Hondoho—mountain big sagebrush and bluebunch wheatgrass; Hymas—low sagebrush and bluebunch wheatgrass; Pavohroo—quaking aspen
General management considerations:

- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Hondoho and Pavohroo—7e, nonirrigated; Hymas—7s, nonirrigated
Ecological site: Hondoho—Steep Slope, 16- to 22-inch precipitation zone; Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone

43—Hondoho-Ridgecrest-Hades association, 12 to 50 percent slopes

Composition

Hondoho and similar soils—35 percent
Ridgecrest and similar soils—30 percent
Hades and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Mountains
Elevation: 4,900 to 7,000 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Hondoho

Position on landscape: North- and east-facing slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam

14 to 28 inches—pale brown very cobbly loam
28 to 60 inches—very pale brown very cobbly loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate or severe

Characteristics of Ridgecrest

Position on landscape: South- and west-facing slopes
Typical profile:
0 to 9 inches—grayish brown very gravelly silt loam
9 to 13 inches—grayish brown very cobbly silt loam
13 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly loam
31 to 35 inches—very pale brown extremely cobbly sandy loam
35 inches—highly fractured limestone

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 3.6 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: High
Hazard of erosion: By water—moderate or severe

Characteristics of Hades

Position on landscape: Smooth or concave slopes
Typical profile:
0 to 20 inches—dark grayish brown and grayish brown silt loam
20 to 42 inches—brown silty clay loam
42 to 60 inches—yellowish brown gravelly silty clay loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate or severe

Minor Components

- Hymas soils on convex ridges (5 percent)
- Rock outcrop on shoulders (5 percent)
- Soils that have slopes of less than 12 percent (3 percent)
- Calpac soils on concave slopes (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Hondoho—Steep Slope, 16- to 22-inch precipitation zone; Ridgecrest and Hades—Loamy, 16- to 22-inch precipitation zone

44—Hutchley-McCarey-Araveton complex, 4 to 40 percent slopes

Composition

Hutchley and similar soils—30 percent
McCarey and similar soils—25 percent
Araveton and similar soils—25 percent
Minor components—20 percent

Setting

Landform: Lava plains
Elevation: 4,900 to 6,200 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Hutchley

Position on landscape: Convex slopes
Typical profile:
0 to 6 inches—dark grayish brown gravelly loam
6 to 13 inches—brown very cobbly clay loam
13 inches—hard, fractured basalt
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 1.6 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: High
Hazard of erosion: By water—severe

Characteristics of McCarey

Position on landscape: Concave or slightly convex slopes on plains
Typical profile:
0 to 8 inches—dark grayish brown silt loam
8 to 15 inches—grayish brown silt loam
15 to 19 inches—pale brown silt loam

19 to 23 inches—very pale brown cobbly silt loam
23 inches—hard, slightly weathered basalt

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 4.4 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Araveton

Position on landscape: Concave slopes on plains
Typical profile:
0 to 8 inches—grayish brown silt loam
8 to 36 inches—brown silt loam
36 to 62 inches—pale brown and very pale brown gravelly loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Hades soils on steep slopes and ridges (5 percent)
- Hondoho soils on steep slopes (5 percent)
- Rexburg soils on smooth or concave slopes (5 percent)
- Rock outcrop on shoulders (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:

- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface in some areas, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Hutchley—6e, nonirrigated; McCarey and Araveton—4e, nonirrigated
Ecological site: Hutchley—Shallow Loamy, 13- to 16-inch precipitation zone; McCarey and Araveton—Loamy, 13- to 16-inch precipitation zone

45—Hymas-Calpac-Ireland association, 30 to 70 percent slopes

Composition

Hymas and similar soils—35 percent
Calpac and similar soils—25 percent
Ireland and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Ridges and mountains
Elevation: 5,000 to 7,500 feet
Climatic data (mean annual):
  Precipitation—about 16 inches
  Air temperature—about 43 degrees F
  Frost-free period—70 to 90 days

Characteristics of Hymas

Position on landscape: Smooth or convex slopes
Typical profile:
  0 to 2 inches—grayish brown very cobbly loam
  2 to 7 inches—brown very cobbly silt loam
  7 to 11 inches—pale brown extremely cobbly loam
  11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Calpac

Position on landscape: Concave slopes
Typical profile:
  0 to 8 inches—dark brown gravelly silt loam
  8 to 15 inches—dark brown very gravelly silt loam
  15 to 23 inches—brown extremely cobbly silt loam
  23 to 60 inches—brown extremely cobbly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Ireland

Typical profile:
  0 to 8 inches—grayish brown very gravelly silt loam
  8 to 28 inches—grayish brown and brown extremely cobbly silt loam
  28 inches—highly fractured limestone

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 2 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Pavohroo soils in depressions (5 percent)
- Povey soils on concave slopes (5 percent)
- Ridgecrest soils on convex slopes (5 percent)
- Rock outcrop on shoulders (5 percent)

Use and Management

Major use: Rangeland (fig. 2)
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Hymas—low sagebrush and bluebunch wheatgrass; Calpac and Ireland—mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: Hymas—7s, nonirrigated; Calpac and Ireland—7e, nonirrigated

Figure 2.—Typical area of Hymas very cobbly loam in an area of Hymas-Calpac-Ireland association, 30 to 70 percent slopes, in foreground. Blue Spring Hills are in background.

Ecological site: Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Calpac and Ireland—Steep Slope, 16- to 22-inch precipitation zone

46—Hymas-Northwater-Clayburn association, 20 to 60 percent slopes

Composition

Hymas and similar soils—30 percent
Northwater and similar soils—30 percent
Clayburn and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Ridges and mountains
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 20 inches
Air temperature—about 43 degrees F
Frost-free period—40 to 90 days

Characteristics of Hymas

Position on landscape: South-facing slopes
Typical profile:
0 to 2 inches—grayish brown very cobbly loam
2 to 7 inches—brown very cobbly silt loam
7 to 11 inches—pale brown extremely cobbly loam
11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Northwater

Position on landscape: Concave, north-facing slopes
Typical profile:
0 to 2 inches—slightly decomposed plant material
2 to 20 inches—dark grayish brown and grayish brown gravelly silt loam
20 to 31 inches—dark grayish brown very gravelly silt loam
31 to 37 inches—light yellowish brown very gravelly loam
37 to 62 inches—light yellowish brown very gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.5 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Clayburn

Position on landscape: Slightly concave slopes

Typical profile:
0 to 4 inches—dark grayish brown silt loam
4 to 21 inches—dark grayish brown and grayish brown loam
21 to 39 inches—light yellowish brown cobbly clay loam
39 to 60 inches—yellowish brown cobbly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Pavohroo soils on concave, north-facing slopes (10 percent)
- Povey soils on concave, north- and east-facing slopes (5 percent)
- Ireland soils on ridges (3 percent)
- Rock outcrop on shoulders (2 percent)

Use and Management

Major use: Rangeland (fig. 3)
Major management factors: Depth to bedrock in some areas, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Hymas—low sagebrush and bluebunch wheatgrass; Northwater—Douglas fir, mountain snowberry, and pine reedgrass; Clayburn—mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Hymas—7s, nonirrigated; Northwater and Clayburn—7e, nonirrigated
Ecological site: Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Northwater—Mountain Loamy, 22+-inch precipitation zone; Clayburn—Loamy, 16- to 22-inch precipitation zone

47—Hymas-Povey association, 30 to 60 percent slopes

Composition

Hymas and similar soils—45 percent
Povey and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Ridges and mountains
Elevation: 5,000 to 7,700 feet

Figure 3.—Typical area of Hymas-Northwater-Clayburn association, 20 to 60 percent slopes. Clayburn silt loam is in areas of aspen, and Northwater gravelly silt loam is in areas of Douglas fir. Malad Valley is in background.

Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 42 degrees F
Frost-free period—60 to 90 days

Characteristics of Hymas

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 2 inches—grayish brown very cobbly loam
2 to 7 inches—brown very cobbly silt loam
7 to 11 inches—pale brown extremely cobbly loam
11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Povey

Position on landscape: North- and east-facing slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam

20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Pavohroo soils on concave slopes (10 percent)
- Calpac soils on northeast-facing slopes (5 percent)
- Ireland soils on east-facing slopes (5 percent)
- Rock outcrop on shoulders (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Hymas—low sagebrush and bluebunch wheatgrass; Povey—mountain big sagebrush and bluebunch wheatgrass
General management considerations:

- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity.
- Use of equipment is limited mainly by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: Hymas—7s, nonirrigated; Povey—7e, nonirrigated
Ecological site: Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Povey—Steep Slope, 16- to 22-inch precipitation zone

48—Hymas-Povey-Pavohroo association, 30 to 70 percent slopes

Composition

Hymas and similar soils—35 percent
Povey and similar soils—25 percent
Pavohroo and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Ridges and mountains
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 18 inches

Air temperature—about 42 degrees F
Frost-free period—40 to 90 days

Characteristics of Hymas

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 2 inches—grayish brown very cobbly loam
2 to 7 inches—brown very cobbly silt loam
7 to 11 inches—pale brown extremely cobbly loam
11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Povey

Position on landscape: East-facing slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Pavohroo

Position on landscape: North- and east-facing, concave slopes
Typical profile:
0 to 1 inch—slightly decomposed plant material
1 to 7 inches—dark brown gravelly silt loam
7 to 16 inches—brown silt loam
16 to 39 inches—brown and light yellowish brown gravelly silt loam
39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Calpac soils on northeast-facing slopes (10 percent)
- Ireland soils on east-facing slopes (5 percent)
- Rock outcrop on shoulders (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Hymas—low sagebrush and bluebunch wheatgrass; Povey—mountain big sagebrush and bluebunch wheatgrass; Pavohroo—quaking aspen
General management considerations:
- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or lack of permanent water developments, or both.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity in some areas.
- Use of equipment is limited by the rock fragments on the surface and by slope.

Interpretive Groups

Land capability classification: Hymas—7s, nonirrigated; Povey and Pavohroo—7e, nonirrigated
Ecological site: Hymas—Shallow Stony, 12- to 16-inch precipitation zone; Povey—Steep Slope, 16- to 22-inch precipitation zone; Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone

49—Inkom silt loam, 0 to 1 percent slopes

Composition

Inkom and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Flood plains
Elevation: 5,000 to 5,600 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 44 degrees F
  Frost-free period—80 to 100 days

Characteristics of Inkom

Typical profile:
  0 to 6 inches—dark grayish brown and grayish brown silt loam
  6 to 60 inches—dark grayish brown, dark gray, very dark gray, light gray, and white silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—0 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: At the surface to a depth of 18 inches below the surface in February through June
Frequency of flooding: Frequent

Minor Components

- Broadhead soils on slightly higher, convex slopes (5 percent)
- Hondoho soils that have slopes of more than 1 percent (5 percent)
- Rexburg soils that have slopes of more than 1 percent (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated pastureland, irrigated cropland, and rangeland
Major management factors: Growing season, wetness, and flooding

Irrigated and nonirrigated pastureland
Suitable crops: Water-tolerant grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- The seasonal high water table provides supplemental moisture for plants.

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- The seasonal high water table provides supplemental moisture for plants.

Rangeland
Dominant vegetation in natural potential plant community: Willow and sedge
General management considerations:
- Seeding of adapted species to improve the range is limited by wetness and flooding.
- Periodic flooding increases the amount of moisture available for plants and thus increases the amount of forage produced.

Interpretive Groups

Land capability classification: 4w, irrigated and nonirrigated
Ecological site: Riparian Wet Meadow

50—Iphil-Ririe-Watercanyon complex, 8 to 20 percent slopes

Composition

Iphil and similar soils—50 percent
Ririe and similar soils—20 percent
Watercanyon and similar soils—15 percent
Minor components—15 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 5,900 feet

Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 115 days

Characteristics of Iphil

Position on landscape: Convex or smooth slopes
Typical profile:
0 to 10 inches—brown silt loam
10 to 36 inches—light gray and very pale brown silt loam
36 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Ririe

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Watercanyon

Position on landscape: Concave slopes
Typical profile:
0 to 5 inches—pale brown silt loam
5 to 33 inches—pale brown and very pale brown silt loam
33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Cedarhill soils on south-facing, smooth or concave slopes (5 percent)
- Soils that have slopes of less than 8 percent or more than 20 percent (5 percent)
- Watercanyon soils on north-facing, convex slopes (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion and conserve moisture by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and returning crop residue to the soil.

Interpretive Groups

Land capability classification: Iphil—4e, nonirrigated; Ririe and Watercanyon—3e, nonirrigated

51—Ireland-Calpac association, 30 to 60 percent slopes

Composition

Ireland and similar soils—40 percent
Calpac and similar soils—35 percent
Minor components—25 percent

Setting

Landform: Mountains and ridges
Elevation: 5,200 to 7,200 feet
Climatic data (mean annual):
Precipitation—about 20 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 90 days

Characteristics of Ireland

Position on landscape: Slightly convex slopes
Typical profile:
0 to 8 inches—grayish brown very gravelly silt loam
8 to 28 inches—grayish brown and brown extremely cobbly silt loam
28 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 2 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Calpac

Position on landscape: Concave slopes
Typical profile:
0 to 8 inches—dark brown gravelly silt loam

8 to 15 inches—dark brown very gravelly silt loam
15 to 23 inches—brown extremely cobbly silt loam
23 to 60 inches—brown extremely cobbly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Pavohroo soils on concave slopes (10 percent)
- Yago soils on ridges and concave slopes (10 percent)
- Povey soils on northeast-facing slopes (3 percent)
- Ridgecrest soils on northeast-facing slopes (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

52—Jensen silt loam, 0 to 2 percent slopes

Composition

Jensen and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Depressions of lake terraces and fan remnants
Elevation: 4,900 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free season—80 to 100 days

Characteristics of Jensen

Typical profile:
0 to 12 inches—brown silt loam
12 to 45 inches—brown and yellowish brown gravelly silt loam

45 to 60 inches—pale brown and gray very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight

Minor Components

- Jovine soils on slightly lower, smooth to concave slopes (10 percent)
- Soils that are in convex areas and have more than 35 percent rock fragments at a depth of 10 to 40 inches (10 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factor: Rock fragments on the surface
Suitable crops: Wheat and barley
General management consideration:
- Rock fragments on the surface make seedbed preparation difficult.

Interpretive Groups

Land capability classification: 3c, nonirrigated

53—Jensen silt loam, 2 to 6 percent slopes

Composition

Jensen and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 4,900 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free season—80 to 100 days

Characteristics of Jensen

Typical profile:
0 to 12 inches—brown silt loam
12 to 45 inches—brown and yellowish brown gravelly silt loam
45 to 60 inches—pale brown and gray very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—moderate

Minor Components

- Soils that have slopes of less than 2 percent or more than 6 percent (5 percent)

- Soils on west-facing, convex slopes that have more than 35 percent rock fragments at a depth of 10 to 40 inches (10 percent)
- Soils on west-facing, convex slopes that have more than 18 percent clay and less than 15 percent rock fragments (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Rock fragments on the surface and water erosion
Suitable crops: Wheat and barley
General management considerations:
- Rock fragments on the surface make seedbed preparation difficult.
- Reduce the risk of water erosion and conserve moisture by constructing terraces, maintaining crop residue on the soil surface, regularly adding organic matter, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 3e, nonirrigated

54—Jensen-Iphil-Wursten complex, 4 to 12 percent slopes

Composition

Jensen and similar soils—30 percent
Iphil and similar soils—25 percent
Wursten and similar soils—25 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 4,900 to 5,900 feet
Climatic data (mean annual):
  Precipitation—about 16 inches
  Air temperature—about 44 degrees F
  Frost-free period—75 to 100 days

Characteristics of Jensen

Position on landscape: Slightly concave or smooth slopes
Slope: 8 to 12 percent
Typical profile:
  0 to 12 inches—brown silt loam
  12 to 45 inches—brown and yellowish brown gravelly silt loam
  45 to 60 inches—pale brown and gray very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Iphil

Position on landscape: Concave slopes
Slope: 4 to 8 percent

Typical profile:
0 to 10 inches—brown silt loam
10 to 36 inches—very pale brown silt loam
36 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Wursten

Position on landscape: Slightly convex slopes
Slope: 4 to 8 percent
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 60 inches—very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.5 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Cedarhill soils on south-facing, convex slopes (5 percent)
- Hades soils on north-facing, concave slopes (5 percent)
- Justesen soils on smooth or concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated and irrigated cropland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion and conserve moisture by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 4e, irrigated, and 3e, nonirrigated

55—Jovine silt loam, 0 to 2 percent slopes

Composition

Jovine and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Depressions and low stream terraces
Elevation: 4,900 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free season—80 to 100 days

Characteristics of Jovine

Typical profile:
0 to 7 inches—grayish brown silt loam
7 to 60 inches—brown and dark grayish brown silt loam
Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Depth to seasonal high water table: 60 to 72 inches in April through June
Runoff: Negligible
Hazard of erosion: By water—none or slight
Frequency of flooding: Rare

Minor Components

- Jensen soils on slightly lower, smooth or concave slopes near depressions (10 percent)
- Soils that are on concave slopes near depressions and have a dark-colored surface layer that is 20 to 30 inches thick (5 percent)
- Toefoot soils in depressions (3 percent)
- Inkom soils in depressions (2 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland
Major management factor: Growing season

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- The short growing season limits the choice of crops.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland

Dominant vegetation in natural potential plant community: Basin big sagebrush and basin wildrye

General management consideration:

- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3c, irrigated and nonirrigated
Ecological site: Loamy Bottom, 12- to 16-inch precipitation zone

56—Justesen silt loam, 4 to 12 percent slopes

Composition

Justesen and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 4,800 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Justesen

Typical profile:
0 to 16 inches—grayish brown silt loam
16 to 27 inches—dark brown and brown silty clay loam
27 to 60 inches—light brown, brownish yellow, and very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Araveton soils on toeslopes (5 percent)
- Arbone soils on broad, convex slopes (5 percent)
- Ecur soils on concave slopes (2 percent)
- Lanoak soils on concave slopes (3 percent)
- Rexburg soils on broad, convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, rock fragments on the surface, water erosion, and slope

Nonirrigated cropland

Suitable crops: Wheat and barley

General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by constructing terraces, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland

Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

57—Justesen silt loam, 12 to 25 percent slopes

Composition

Justesen and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 4,800 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Justesen

Typical profile:
0 to 16 inches—grayish brown silt loam
16 to 27 inches—dark brown and brown silty clay loam
27 to 60 inches—light brown, brownish yellow, and very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Araveton soils on toeslopes (5 percent)
- Arbone soils on broad, convex slopes (10 percent)
- Hondoho soils on toeslopes (5 percent)
- Manila soils on broad, smooth slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland

Major management factors: Growing season, rock fragments on the surface, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by water erosion.
- After seeding, defer grazing until young plants are well established.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

58—Justesen-Ririe-Buist complex, 12 to 20 percent slopes

Composition

Justesen and similar soils—50 percent
Ririe and similar soils—30 percent
Buist and similar soils—15 percent
Minor components—5 percent

Setting

Landform: Hills and fan remnants
Elevation: 5,000 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—85 to 95 days

Characteristics of Justesen

Position on landscape: Slightly convex slopes
Typical profile:
0 to 8 inches—dark grayish brown silt loam
8 to 27 inches—brown and light yellowish brown silt loam and silty clay loam
27 to 45 inches—light yellowish brown silt loam
45 to 60 inches—light yellowish brown and very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more

Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Ririe

Position on landscape: Slightly convex or smooth slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Buist

Position on landscape: Convex slopes
Typical profile:
0 to 15 inches—brown gravelly silt loam
15 to 28 inches—brown and very pale brown very gravelly loam
28 to 60 inches—very pale brown extremely gravelly fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Soils that have slopes of less than 12 percent or more than 20 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 4e, nonirrigated

59—Kearns silt loam, 0 to 2 percent slopes

Composition

Kearns and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 48 degrees F
Frost-free season—100 to 120 days

Characteristics of Kearns

Typical profile:
0 to 8 inches—grayish brown silt loam
8 to 32 inches—light brownish gray and pale brown silt loam
32 to 67 inches—very pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight

Minor Components

- Arbone soils on adjacent higher terrace slopes (5 percent)
- Neeley soils on convex slopes (10 percent)
- Parleys and DeJarnet soils on convex slopes (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factor: Depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

60—Kearns silt loam, 2 to 4 percent slopes

Composition

Kearns and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 48 degrees F
Frost-free season—100 to 120 days

Characteristics of Kearns

Typical profile:
0 to 8 inches—grayish brown silt loam
8 to 32 inches—light brownish gray and pale brown silt loam
32 to 67 inches—very pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Neeley soils on convex slopes (5 percent)
- Parleys soils on concave slopes (10 percent)
- Pollynot soils on convex slopes (10 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factor: Depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls

irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

61—Kidman fine sandy loam, 1 to 4 percent slopes

Composition

Kidman and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,500 to 4,800 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—110 to 120 days

Characteristics of Kidman

Typical profile:
0 to 17 inches—brown and grayish brown fine sandy loam
17 to 38 inches—grayish brown fine sandy loam
38 to 66 inches—pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 7.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very low
Hazard of erosion: By water—slight; by wind—moderate

Minor Components

- Preston soils on convex slopes (5 percent)
- Soils that are on smooth terraces and have more than 15 percent fine sand or coarser material at a depth of 10 to 40 inches (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland
Major management factor: Wind erosion

Irrigated cropland
Suitable crop: Barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity, the water intake rate, and the needs of the crop grown to avoid overirrigating and leaching of plant nutrients.
- Minimize the risk of erosion and conserve moisture by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2e, irrigated, and 3e, nonirrigated

62—Kidman-Preston association, 2 to 12 percent slopes

Composition

Kidman and similar soils—60 percent
Preston and similar soils—25 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,500 to 4,800 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 47 degrees F
Frost-free period—110 to 130 days

Characteristics of Kidman

Position on landscape: Smooth slopes
Typical profile:
0 to 17 inches—brown and grayish brown fine sandy loam
17 to 38 inches—grayish brown fine sandy loam
38 to 66 inches—pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 7.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very low
Hazard of erosion: By water—moderate; by wind—moderate

Characteristics of Preston

Position on landscape: Convex slopes
Typical profile:
0 to 3 inches—grayish brown fine sand
3 to 65 inches—grayish brown and pale brown fine sand
Depth class: Very deep
Drainage class: Excessively drained
Permeability: Rapid
Available water capacity: 3.3 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—moderate; by wind—severe

Minor Components

- Hans soils on lower, convex slopes (5 percent)
- Kearns soils on convex slopes (5 percent)
- Welby soils on concave slopes (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland, and rangeland
Major management factors: Permeability in some areas, available water capacity in some areas, water erosion, wind erosion, and slope

Irrigated cropland
Suitable crop: Barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity, the water intake rate, and the needs of the crop grown to avoid overirrigating and leaching of plant nutrients.
- Reduce the risks of water and wind erosion and conserve moisture by maintaining crop residue on the soil surface, planting crops in narrow strips at right angles to the prevailing wind, and limiting the number of tillage operations.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Kidman—antelope bitterbrush and Indian ricegrass; Preston—basin big sagebrush and Indian ricegrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the restricted available water capacity in some areas, water erosion, and wind erosion.
- Production is limited mainly by the restricted available water capacity in some areas and by wind erosion.

Interpretive Groups

Land capability classification: Kidman—3e, irrigated and nonirrigated; Preston—4s, irrigated, and 6s, nonirrigated
Ecological site: Kidman—Sand, 12- to 16-inch precipitation zone; Preston—Sand, 8- to 12-inch precipitation zone

63—Kucera silt loam, 4 to 12 percent slopes

Composition

Kucera and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,300 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 45 degrees F
Frost-free period—90 to 100 days

Characteristics of Kucera

Typical profile:
0 to 22 inches—dark grayish brown and brown silt loam
22 to 42 inches—pale brown silt loam
42 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Bothwell soils on concave slopes (10 percent)
- Jensen soils on convex slopes (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland, irrigated and nonirrigated hayland, and nonirrigated pastureland
Major management factors: Growing season and water erosion

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Minimize the risk of erosion and conserve moisture by maintaining crop residue on the soil surface, farming across the slope, and constructing terraces, diversions, and grassed waterways.

Irrigated and nonirrigated hayland and nonirrigated pastureland
Suitable crops: Alfalfa hay and pasture
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Interpretive Groups

Land capability classification: 4e, irrigated, and 3e, nonirrigated

64—Lagonot silt loam, 0 to 3 percent slopes

Composition

Lagonot and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces and flood plains
Elevation: 4,300 to 4,700 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 46 degrees F
Frost-free period—100 to 110 days

Characteristics of Lagonot

Typical profile:
0 to 10 inches—grayish brown silt loam
10 to 60 inches—light brownish gray, light gray, and pale yellow silt loam
Depth class: Very deep
Drainage class: Somewhat poorly drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—18 to 42 inches
Runoff: Low
Hazard of erosion: By water—none or slight; by wind—moderate
Depth to seasonal high water table: 18 to 42 inches in October through June
Frequency of flooding: Rare

Minor Components

- Soils that are on relict oxbows and have more than 15 percent fine sand or coarser material between depths of 10 and 40 inches (3 percent)
- Soils that are on raised convex mounds, are calcareous throughout, and have a dark-colored surface layer that is 20 to 35 inches thick (3 percent)
- Fridlo soils on slightly higher mounds (2 percent)
- Logan soils in depressions (2 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland, hayland, and pastureland
Major management factors: Wetness and wind erosion

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The seasonal high water table provides supplemental moisture for plants.
- Because of the limited precipitation during the growing season, this unit is not suited to continuous cropping unless it is irrigated.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Maintain tilth, fertility, and the water intake rate by limiting the number of tillage operations.
- Minimize the risk of erosion and conserve moisture by limiting the number of tillage

operations, planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated and nonirrigated hayland and pastureland
Suitable crops: Alfalfa hay and pasture
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- The seasonal high water table provides supplemental moisture for plants.

Interpretive Groups

Land capability classification: 3w, irrigated and nonirrigated

65—Langless silt loam, 0 to 2 percent slopes

Composition

Langless and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Low lake terraces
Elevation: 4,300 to 4,500 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free season—100 to 120 days

Characteristics of Langless

Typical profile:
0 to 3 inches—slightly decomposed plant material
3 to 9 inches—dark gray silt loam
9 to 47 inches—gray, white, and very pale brown silt loam
47 to 63 inches—light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Available water capacity: 11 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—12 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: 12 to 18 inches in October through June
Frequency of flooding: Frequent

Minor Components

- Logan soils on slightly convex slopes (5 percent)
- Soils that are on slightly higher terraces and have a high water table at a depth of 18 to 36 inches in spring (5 percent)
- Soils that are on slightly higher terraces, are calcareous throughout, and average more than 18 percent clay between depths of 10 and 40 inches (3 percent)

- Soils that are on terraces and have accumulations of salt in the upper 40 inches (2 percent)

Use and Management

Major uses: Irrigated pastureland, and rangeland
Major management factors: Depth to carbonates, wetness, and flooding

Irrigated pastureland
Suitable crops: Water-tolerant grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- The quality of the forage is limited by the seasonal high water table and the frequency of flooding.

Rangeland
Dominant vegetation in natural potential plant community: Tufted hairgrass and sedge
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Periodic flooding increases the amount of moisture available for plants and thus increases the amount of forage produced.
- The use of equipment is limited by wetness.

Interpretive Groups

Land capability classification: 5w, irrigated and nonirrigated
Ecological site: Wet Meadow

66—Langless-Logan complex, 0 to 2 percent slopes

Composition

Langless and similar soils—55 percent
Logan and similar soils—30 percent
Minor components—15 percent

Setting

Landform: Low lake terraces
Elevation: 4,300 to 4,700 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 46 degrees F
Frost-free period—110 to 130 days

Characteristics of Langless

Position on landscape: Concave slopes
Typical profile:
0 to 3 inches—slightly decomposed plant material
3 to 9 inches—dark gray silt loam

9 to 47 inches—gray, white, and very pale brown silt loam
47 to 63 inches—light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Available water capacity: 11 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—12 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: 12 to 18 inches in October through June
Frequency of flooding: Frequent

Characteristics of Logan

Position on landscape: Convex slopes
Typical profile:
0 to 4 inches—slightly decomposed plant material
4 to 22 inches—gray silt loam
22 to 64 inches—gray and light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderately slow
Available water capacity: 13.8 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—0 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: At the surface to a depth of 18 inches below the surface in March through July
Frequency of flooding: Rare

Minor Components

- Bloor soils near relict oxbows (10 percent)
- Fridlo soils on slightly higher mounds (5 percent)

Use and Management

Major uses: Irrigated pastureland, and rangeland
Major management factors: Depth to carbonates, wetness, and flooding

Irrigated pastureland
Suitable crops: Water-tolerant grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- The seasonal high water table provides supplemental moisture for plants.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- The quality of the forage is limited by the seasonal high water table and the frequency of flooding.

Rangeland
Dominant vegetation in natural potential plant community: Tufted hairgrass and sedge
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Periodic flooding increases the amount of moisture available for plants and thus increases the amount of forage produced.
- The use of equipment is limited by wetness.

Interpretive Groups

Land capability classification: 5w, irrigated and nonirrigated
Ecological site: Wet Meadow

67—Lanoak silt loam, 0 to 4 percent slopes

Composition

Lanoak and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Fan remnants
Elevation: 5,100 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Lanoak

Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Rexburg soils on convex slopes (5 percent)
- Soils that have slopes of more than 4 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factor: Growing season

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- A tillage pan forms easily if the soil is tilled when wet.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3c, nonirrigated

68—Lanoak silt loam, 12 to 30 percent slopes

Composition

Lanoak and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Fan remnants
Elevation: 5,100 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 42 degrees F
Frost-free period—80 to 100 days

Characteristics of Lanoak

Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Bothwell soils on convex slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and conserve moisture by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, rotating crops, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 4e, nonirrigated

69—Lanoak-Hondoho complex, 6 to 20 percent slopes

Composition

Lanoak and similar soils—45 percent
Hondoho and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 6,700 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—75 to 100 days

Characteristics of Lanoak

Position on landscape: Backslopes
Slope: 6 to 15 percent
Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: Concave slopes
Slope: 10 to 20 percent
Typical profile:
0 to 14 inches—dark brown and grayish brown gravelly silt loam
14 to 28 inches—brown very cobbly loam
28 to 60 inches—brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7.1 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on east- and south-facing, convex slopes (10 percent)
- Manila soils on higher lying convex slopes (10 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3e, nonirrigated

70—Logan silt loam, 0 to 2 percent slopes

Composition

Logan and similar soils—95 percent
Minor components—5 percent

Setting

Landform: Low lake terraces and flood plains
Elevation: 4,300 to 4,700 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 46 degrees F
Frost-free period—110 to 130 days

Characteristics of Logan

Typical profile:
0 to 4 inches—slightly decomposed plant material
4 to 22 inches—gray silt loam
22 to 64 inches—gray and light gray silt loam
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderately slow
Available water capacity: 13.8 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—0 to 18 inches
Runoff: Negligible

Hazard of erosion: By water—none or slight
Depth to seasonal high water table: At the surface to a depth of 18 inches below the surface in March through July
Frequency of flooding: Rare

Minor Components

- Soils that are on relict oxbows and have more than 15 percent fine sand or coarser material between depths of 10 and 40 inches (3 percent)
- Soils that are on convex mounds, are calcareous throughout, and have a dark-colored surface layer that is 20 to 35 inches thick (1 percent)
- Fridlo soils in slightly higher lying, convex areas (1 percent)

Use and Management

Major uses: Irrigated pastureland, and rangeland
Major management factors: Depth to carbonates, wetness, and flooding

Irrigated pastureland
Suitable crops: Water-tolerant grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- The seasonal high water table provides supplemental moisture for plants.

Rangeland
Dominant vegetation in natural potential plant community: Tufted hairgrass and sedges
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Periodic flooding increases the amount of moisture available for plants and thus increases the amount of forage produced.
- The use of equipment is limited by wetness.

Interpretive Groups

Land capability classification: 5w, irrigated and nonirrigated
Ecological site: Wet Meadow

71—Lonigan-Lizdale association, 6 to 40 percent slopes

Composition

Lonigan and similar soils—45 percent
Lizdale and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Mountains
Elevation: 4,800 to 6,400 feet

Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Lonigan

Position on landscape: South-facing, convex slopes
Slope: 12 to 40 percent
Typical profile:
0 to 11 inches—grayish brown very fine sandy loam
11 to 16 inches—light brownish gray very gravelly loam
16 to 33 inches—very pale brown very gravelly loam
33 inches—weathered tuff
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.5 inches
Restriction to rooting depth: Weathered tuff at a depth of 20 to 40 inches
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Lizdale

Position on landscape: North-facing, concave slopes
Slope: 6 to 30 percent
Typical profile:
0 to 7 inches—dark grayish brown very gravelly silt loam
7 to 36 inches—brown very gravelly loam and pink very gravelly sandy loam
36 to 60 inches—light brown extremely gravelly sandy loam and extremely gravelly loamy sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.9 inches
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Copenhagen soils on higher lying backslopes (5 percent)
- Manila soils on smooth, lower lying backslopes (5 percent)
- Pavohroo soils on north-facing slopes (5 percent)
- Soils that have slopes of less than 6 percent or more than 40 percent (5 percent)

Use and Management

Major use: Rangeland (fig. 4)
Major management factors: Rock fragments on the surface in some areas, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.

Figure 4.—Typical area of Lizdale very gravelly silt loam in an area of Lonigan-Lizdale association, 6 to 40 percent slopes, in foreground. Copenhagen-Lonigan-Manila association, 12 to 50 percent slopes, is in background.

- Use of equipment is limited by the rock fragments on the surface in some areas and slope.

Interpretive Groups

Land capability classification: Lonigan—6e, nonirrigated; Lizdale—3e, nonirrigated
Ecological site: Lonigan—Ashy Loam, 13- to 16-inch precipitation zone; Lizdale—Loamy, 16- to 22-inch precipitation zone

72—Lostine silt loam, 20 to 30 percent slopes

Composition

Lostine and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,300 to 5,800 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Lostine

Typical profile:
0 to 7 inches—dark grayish brown silt loam

7 to 45 inches—brown silt loam
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 11.1 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Ririe soils on south-, north-, and west-facing, smooth slopes (10 percent)
- Kucera soils on smooth to slightly concave slopes (10 percent)
- Hondoho soils on concave slopes near depressions (5 percent)

Use and Management

Major use: Rangeland
Major management factor: Water erosion
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

73—Manila silt loam, 4 to 12 percent slopes

Composition

Manila and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 42 degrees F
Frost-free period—70 to 90 days

Characteristics of Manila

Typical profile:
0 to 5 inches—dark grayish brown silt loam
5 to 45 inches—grayish brown, yellowish brown, and pale brown silty clay loam and silty clay
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more

Runoff: High
Hazard of erosion: By water—moderate

Minor Components

- Elevator soils on smooth to convex slopes (5 percent)
- Jensen soils in depressions and on concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (2 percent)
- Thatcher soils on convex, lower lying slopes (3 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland, and rangeland
Major management factors: Growing season, permeability, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and increase the water intake rate by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 16- to 22-inch precipitation zone

74—Manila-Broadhead complex, 4 to 12 percent slopes

Composition

Manila and similar soils—45 percent
Broadhead and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Plains and fan remnants
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Manila

Position on landscape: Convex or slightly concave slopes
Typical profile:
0 to 5 inches—brown silt loam
5 to 45 inches—brown, yellowish brown, light brown, and pink silty clay loam and silty clay
45 to 60 inches—pink silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate

Characteristics of Broadhead

Position on landscape: Convex slopes
Typical profile:
0 to 9 inches—dark grayish brown silt loam
9 to 36 inches—dark grayish brown, brown, and yellowish brown silty clay loam and silty clay
36 to 60 inches—very pale brown gravelly silty clay and gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Impermeable
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate

Minor Components

- Thatcher soils on convex slopes (10 percent)
- Obnot soils on concave slopes (5 percent)
- Rexburg soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland (fig. 5), and rangeland (fig. 6)
Major management factors: Growing season, permeability, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and increase the water intake rate by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Figure 5.—Typical area of Broadhead silt loam in an area of Manila-Broadhead complex, 4 to 12 percent slopes, in foreground. Manila silt loam is in background.

Figure 6.—Typical area of Manila silt loam in an area of Manila-Broadhead complex, 4 to 12 percent slopes, in foreground. Oxford Mountain is in background.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 16- to 22-inch precipitation zone

75—Manila-Broadhead complex, 12 to 30 percent slopes

Composition

Manila and similar soils—45 percent
Broadhead and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Plains and fan remnants
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
  Precipitation—about 18 inches
  Air temperature—about 43 degrees F
  Frost-free period—70 to 100 days

Characteristics of Manila

Position on landscape: Convex and slightly concave slopes
Typical profile:
  0 to 5 inches—grayish brown silt loam
  5 to 45 inches—light brown silty clay loam and silty clay
  45 to 60 inches—light brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Broadhead

Position on landscape: Convex slopes
Typical profile:
  0 to 9 inches—dark grayish brown silt loam
  9 to 36 inches—dark grayish brown, brown, and yellowish brown silty clay loam and silty clay
  36 to 60 inches—yellowish brown gravelly silt loam and very pale brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Impermeable
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Yago soils on steep slopes and in depressions (10 percent)
- Obnot soils on concave slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)
- Thatcher soils on convex slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and increase the water intake rate by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by water erosion.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Loamy, 16- to 22-inch precipitation zone

76—Manila-Lonigan complex, 6 to 40 percent slopes

Composition

Manila and similar soils—50 percent
Lonigan and similar soils—30 percent
Minor components—20 percent

Setting

Landform: Mountains and fan remnants
Elevation: 4,800 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 17 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 95 days

Characteristics of Manila

Position on landscape: Convex slopes and slightly concave toeslopes
Typical profile:
0 to 5 inches—dark grayish brown silt loam
5 to 45 inches—grayish brown, yellowish brown, and pale brown silty clay loam and silty clay
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Lonigan

Position on landscape: Convex slopes
Typical profile:
0 to 11 inches—grayish brown very fine sandy loam

11 to 16 inches—light brownish gray very gravelly loam
16 to 33 inches—very pale brown and white very gravelly loam
33 inches—weathered tuff

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.2 inches
Restriction to rooting depth: Weathered tuff at a depth of 20 to 40 inches
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Broadhead soils on concave slopes (10 percent)
- Calpac soils on concave slopes (5 percent)
- Copenhagen soils on convex ridges (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability in some areas, available water capacity in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crop: Barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and increase the water intake rate by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Manila—Loamy, 16- to 22-inch precipitation zone; Lonigan—Ashy Loam, 13- to 16-inch precipitation zone

77—Manila-Obnot complex, 4 to 12 percent slopes

Composition

Manila and similar soils—50 percent
Obnot and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Hills and fan remnants
Elevation: 4,900 to 6,500 feet

Climatic data (mean annual):
Precipitation—about 17 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 95 days

Characteristics of Manila

Position on landscape: Convex and slightly concave toeslopes
Typical profile:
0 to 5 inches—dark grayish brown silt loam
5 to 45 inches—grayish brown, yellowish brown, and pale brown silty clay loam and silty clay
45 to 60 inches—pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate

Characteristics of Obnot

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—dark grayish brown cobbly silty clay loam
5 to 34 inches—dark grayish brown, brown, and light brown silty clay and clay loam
34 to 60 inches—pink cobbly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Very slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate

Minor Components

- Yago soils on steep slopes and in depressions (10 percent)
- Broadhead soils on concave slopes (5 percent)
- Hondoho soils on convex ridges (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- The short growing season limits the choice of crops.
- Minimize the risk of erosion and increase the water intake rate by constructing terraces, chiseling stubble fields on the contour or across the slope in fall,

maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland

Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management consideration:

- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: Manila—3e, nonirrigated; Obnot—6s, nonirrigated
Ecological site: Loamy, 16- to 22-inch precipitation zone

78—Manila-Yago complex, 4 to 12 percent slopes

Composition

Manila and similar soils—45 percent
Yago and similar soils—40 percent
Minor components—15 percent

Setting

Landform: Fan remnants (fig. 7)
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 90 days

Characteristics of Manila

Position on landscape: Convex and slightly concave slopes
Typical profile:
0 to 5 inches—brown silt loam
5 to 45 inches—brown and light brown silty clay loam and silty clay
45 to 60 inches—pink silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate

Characteristics of Yago

Position on landscape: Convex slopes
Typical profile:
0 to 10 inches—dark brown very stony silty clay loam
10 to 40 inches—strong brown and reddish yellow very cobbly clay loam
40 to 60 inches—reddish yellow very cobbly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 7.8 inches
Potential rooting depth: 60 inches or more

Figure 7.—Typical area of Manila-Yago complex, 4 to 12 percent slopes, in foreground. Ridgecrest-Hymas association, 30 to 60 percent slopes, under sagebrush in center. Oxford Mountain is in background.

Runoff: High
Hazard of erosion: By water—moderate

Minor Components

- Broadhead soils on concave slopes (5 percent)
- Hades soils on ridges and concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion and increase the water intake rate by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, rotating crops, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass

General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Use of equipment is limited by the rock fragments on the surface in some areas.

Interpretive Groups

Land capability classification: Manila—3e, nonirrigated; Yago—6e, nonirrigated
Ecological site: Manila—Loamy, 16- to 22-inch precipitation zone; Yago—Stony Loam, 16- to 22-inch precipitation zone

79—Manila-Yago complex, 12 to 30 percent slopes

Composition

Manila and similar soils—45 percent
Yago and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 90 days

Characteristics of Manila

Position on landscape: Convex and slightly concave slopes
Typical profile:
0 to 5 inches—brown silt loam
5 to 45 inches—brown and light brown silty clay loam and silty clay
45 to 60 inches—pink silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Yago

Position on landscape: Convex slopes
Typical profile:
0 to 10 inches—dark brown very stony silty clay loam
10 to 40 inches—strong brown and reddish yellow very cobbly clay loam
40 to 60 inches—reddish yellow very cobbly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 7.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Broadhead soils on concave slopes (10 percent)
- Hades soils on ridges and concave slopes (5 percent)
- Lizdale soils on steep slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion and increase the water intake rate by chiseling stubble fields on the contour or across the slope in fall, rotating crops, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface in some areas and water erosion.
- Use of equipment is limited by the rock fragments on the surface in some areas.

Interpretive Groups

Land capability classification: Manila—4e, nonirrigated; Yago—6e, nonirrigated
Ecological site: Manila—Loamy, 16- to 22-inch precipitation zone; Yago—Stony Loam, 16- to 22-inch precipitation zone

80—Mellor-Freedom complex, 0 to 2 percent slopes

Composition

Mellor and similar soils—50 percent
Freedom and similar soils—35 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,300 to 4,600 feet
Climatic data (mean annual):
Precipitation—about 10 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 110 days

Characteristics of Mellor

Position on landscape: Smooth slopes
Typical profile:
0 to 4 inches—pale brown silt loam
4 to 16 inches—pale brown and light gray silty clay loam
16 to 60 inches—light gray silt loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 7.3 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate

Characteristics of Freedom

Position on landscape: Smooth slopes
Typical profile:
 0 to 13 inches—light brownish gray silt loam
 13 to 34 inches—light gray silt loam
 34 to 60 inches—light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate

Minor Components

- Bayhook soils on convex summits (10 percent)
- Ecur soils on terrace shoulders (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland, and rangeland
Major management factors: Permeability in some areas, depth to carbonates, salinity, sodicity, and wind erosion

Irrigated cropland
Suitable crop: Barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Excess salts limit the production of crops.
- An unfavorable calcium-to-magnesium ratio limits the growth of many plants.
- Minimize the risk of erosion and increase the water intake rate by subsoiling, maintaining crop residue on the soil surface, planting crops in narrow strips at right angles to the prevailing wind, and limiting the number of tillage operations.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Mellor—shadscale saltbush

and bottlebrush squirreltail; Freedom—basin big sagebrush and bluebunch wheatgrass

General management considerations:

- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by salinity, sodicity, and wind erosion.
- Production is limited mainly by low precipitation during the growing season, salinity, and sodicity.

Interpretive Groups

Land capability classification: Mellor—4s, irrigated, and 6s, nonirrigated; Freedom—3s, irrigated, and 6s, nonirrigated

Ecological site: Mellor—Alkali Flats, 8- to 12-inch precipitation zone; Freedom—Loamy, 8- to 11-inch precipitation zone

81—Neeley silt loam, 0 to 4 percent slopes

Composition

Neeley and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces and fan remnants
Elevation: 4,800 to 5,100 feet
Climatic data (mean annual):
Precipitation—about 12 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Neeley

Typical profile:
0 to 7 inches—grayish brown and brown silt loam
7 to 14 inches—pale brown silt loam
14 to 65 inches—light gray and pale yellow silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 13 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Darkbull soils on convex summits (5 percent)
- Pyrat soils on convex summits (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland, hayland, and pastureland, and rangeland

Major management factors: Amount of precipitation and time of year it is received (winter and early in spring) and depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Because of the limited precipitation, this unit is not suited to continuous cropping unless it is irrigated.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland and pastureland
Suitable crops: Alfalfa hay and pasture
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: 2e, irrigated, and 4c, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

82—Northwater-Povey-Pavohroo association, 30 to 60 percent slopes

Composition

Northwater and similar soils—35 percent
Povey and similar soils—30 percent
Pavohroo and similar soils—15 percent
Minor components—20 percent

Setting

Landform: Mountains
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 22 inches
Air temperature—about 40 degrees F
Frost-free period—40 to 70 days

Characteristics of Northwater

Position on landscape: Slightly concave, north-facing slopes
Typical profile:
0 to 2 inches—slightly decomposed plant material

2 to 20 inches—dark grayish brown and grayish brown gravelly silt loam
20 to 31 inches—dark grayish brown very gravelly silt loam
31 to 37 inches—light yellowish brown very gravelly loam
37 to 62 inches—light yellowish brown very gravelly clay loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.5 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Povey

Position on landscape: South- and east-facing slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Pavohroo

Position on landscape: Concave slopes
Typical profile:
0 to 1 inch—slightly decomposed plant material
1 to 7 inches—dark brown gravelly silt loam
7 to 16 inches—brown silt loam
16 to 39 inches—brown and light yellowish brown gravelly silt loam
39 to 61 inches—light yellowish brown gravelly clay loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Calpac soils on toeslopes (5 percent)
- Ireland soils on ridges (5 percent)
- Rock outcrop on shoulders (5 percent)
- Soils that have slopes of less than 30 percent (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Available water capacity in some areas, water erosion, and slope

Dominant vegetation in natural potential plant community: Northwater—Douglas fir and mountain snowberry; Povey—mountain big sagebrush and bluebunch wheatgrass; Pavohroo—quaking aspen

General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Northwater—Mountain Loamy, 22+-inch precipitation zone; Povey—Steep Slope, 16- to 22-inch precipitation zone; Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone

83—Parehat silt loam, 0 to 2 percent slopes

Composition

Parehat and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Low stream terraces
Elevation: 4,300 to 4,500 feet
Climatic data (mean annual):
Precipitation—about 11 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 115 days

Characteristics of Parehat

Typical profile:
0 to 6 inches—grayish brown silt loam
6 to 52 inches—brown, light brownish gray, and grayish brown silt loam
52 to 64 inches—light brownish gray loam
Depth class: Very deep
Drainage class: Somewhat poorly drained
Permeability: Moderate
Available water capacity: 11.6 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—24 to 48 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight
Depth to seasonal high water table: 24 to 36 inches in April through July
Frequency of flooding: Occasional

Minor Components

- Goosenawt soils in depressions (10 percent)

Use and Management

Major use: Irrigated pastureland
Major management factors: Salinity, wetness, and flooding

Suitable crops: Water-tolerant grasses
General management considerations:
- To maintain the quality of meadows and to produce good yields of forage, conservation practices such as using an irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.
- The seasonal high water table provides supplemental moisture for plants.
- Seed only pasture plants that tolerate periodic inundation and seasonal wetness.

Interpretive Groups

Land capability classification: 5w, irrigated and nonirrigated

84—Parleys silt loam, 0 to 2 percent slopes

Composition

Parleys and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Parleys

Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 26 inches—grayish brown and brown silty clay loam
26 to 64 inches—white and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12.8 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—none or slight

Minor Components

- Arbone soils on higher lying terrace slopes (5 percent)
- Fridlo soils on lower lying terrace slopes (5 percent)
- Kearns soils on convex slopes (2 percent)
- Raldridge soils on convex slopes (3 percent)
- Neeley soils on convex slopes (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Few limitations

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley

General management consideration:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

85—Parleys silt loam, 2 to 4 percent slopes

Composition

Parleys and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
 Precipitation—about 14 inches
 Air temperature—about 48 degrees F
 Frost-free period—100 to 120 days

Characteristics of Parleys

Typical profile:
 0 to 5 inches—grayish brown silt loam
 5 to 26 inches—grayish brown and brown silty clay loam
 26 to 64 inches—white and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12.8 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Kearns soils on convex terraces (10 percent)
- Raldridge soils on concave terraces (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Few limitations

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley

General management consideration:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2e, irrigated, and 3e, nonirrigated

86—Parleys-Welby complex, 2 to 12 percent slopes

Composition

Parleys and similar soils—50 percent
Welby and similar soils—35 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 130 days

Characteristics of Parleys

Position on landscape: Slightly convex or smooth slopes
Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 26 inches—grayish brown and brown silty clay loam
26 to 64 inches—white and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Welby

Position on landscape: Smooth slopes
Typical profile:
0 to 11 inches—brown silt loam
11 to 36 inches—very pale brown silt loam
36 to 60 inches—very pale brown fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate

Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Lostine soils in depressions (5 percent)
- Soils that have slopes of more than 12 percent (5 percent)
- Wheelon soils on convex shoulders (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland, and rangeland
Major management factors: Depth to carbonates in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, maintaining crop residue on the soil surface, chiseling stubble fields on the contour or across the slope in fall, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 12- to 16-inch precipitation zone

87—Parleys-Wheelon complex, 4 to 12 percent slopes

Composition

Parleys and similar soils—60 percent
Wheelon and similar soils—15 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Parleys

Position on landscape: Slightly convex or smooth slopes
Slope range: 4 to 8 percent
Typical profile:
  0 to 5 inches—grayish brown silt loam
  5 to 26 inches—grayish brown and brown silty clay loam
  26 to 64 inches—white and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Wheelon

Position on landscape: Convex slopes
Slope: 6 to 12 percent
Typical profile:
  0 to 8 inches—pale brown silt loam
  8 to 45 inches—very pale brown silt loam and silty clay loam
  45 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Kearns soils on concave slopes (10 percent)
- Collinston soils on concave slopes (5 percent)
- Hillfield soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Depth to carbonates in some areas, water erosion, and slope in some areas

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Interpretive Groups

Land capability classification: Parleys—3e, irrigated and nonirrigated; Wheelon—4e, irrigated, and 3e, nonirrigated

88—Pavohroo-Povey association, 30 to 60 percent slopes

Composition

Pavohroo and similar soils—45 percent
Povey and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Mountains
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 20 inches
Air temperature—about 40 degrees F
Frost-free period—40 to 70 days

Characteristics of Pavohroo

Position on landscape: North-facing, concave slopes
Typical profile:
0 to 1 inch—slightly decomposed plant material
1 to 7 inches—dark brown gravelly silt loam
7 to 16 inches—brown silt loam
16 to 39 inches—brown and light yellowish brown gravelly silt loam
39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Povey

Position on landscape: South- and east-facing slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Ireland soils on east-facing slopes (10 percent)
- Northwater soils on north-facing slopes (10 percent)
- Calpac soils on northeast-facing slopes (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Pavohroo—quaking aspen; Povey—mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone; Povey—Steep Slope, 16- to 22-inch precipitation zone

89—Pavohroo-Stines-Lonigan association, 10 to 40 percent slopes

Composition

Pavohroo and similar soils—45 percent
Stines and similar soils—30 percent
Lonigan and similar soils—20 percent
Minor components—5 percent

Setting

Landform: Mountains
Elevation: 4,800 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 41 degrees F
Frost-free period—40 to 95 days

Characteristics of Pavohroo

Position on landscape: North-facing slopes

Typical profile:
0 to 1 inch—slightly decomposed plant material
1 to 7 inches—dark brown gravelly silt loam
7 to 16 inches—brown silt loam
16 to 39 inches—brown and light yellowish brown gravelly silt loam
39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Stines

Position on landscape: East-facing, convex and slightly concave slopes
Typical profile:
0 to 13 inches—dark grayish brown gravelly loam
13 to 24 inches—pale brown very gravelly loam
24 to 44 inches—light gray very gravelly sandy loam
44 to 60 inches—light gray extremely cobbly loamy sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Lonigan

Position on landscape: Slightly concave slopes
Typical profile:
0 to 11 inches—grayish brown very fine sandy loam
11 to 16 inches—light brownish gray very gravelly loam
16 to 33 inches—very pale brown and white very gravelly loam
33 inches—weathered tuff
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: 4.5 inches
Restriction to rooting depth: Weathered tuff at a depth of 20 to 40 inches
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Small areas of Rock outcrop on shoulders (3 percent)
- Hutchley soils on ridges (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Available water capacity in some areas, water erosion, and slope

Dominant vegetation in natural potential plant community: Pavohroo—quaking aspen; Stines and Lonigan—mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- After seeding, defer grazing until young plants are well established.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: Pavohroo and Lonigan—6e, nonirrigated; Stines—4e, nonirrigated
Ecological site: Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone; Stines—Loamy, 16- to 22-inch precipitation zone; Lonigan—Ashy Loam, 13- to 16-inch precipitation zone

90—Pits, gravel

Pits are open excavations from which the soil and part of the underlying sand, gravel, and cobbles have been removed. This unit generally is on terraces created by the ancient Lake Bonneville flood. The underlying material supports very little, if any, vegetation. The land capability classification is 8.

91—Povey-Hades-Hondoho association, 10 to 50 percent slopes

Composition

Povey and similar soils—35 percent
Hades and similar soils—30 percent
Hondoho and similar soils—25 percent
Minor components—10 percent

Setting

Landform: Mountains
Elevation: 4,900 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 40 degrees F
Frost-free period—60 to 100 days

Characteristics of Povey

Position on landscape: North- and east-facing, concave slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches

Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate or severe

Characteristics of Hades

Position on landscape: Concave slopes
Typical profile:
0 to 20 inches—dark grayish brown and grayish brown silt loam
20 to 42 inches—brown silty clay loam
42 to 60 inches—yellowish brown gravelly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate or severe

Characteristics of Hondoho

Position on landscape: West-facing, convex slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 28 inches—pale brown very cobbly loam
28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—moderate or severe

Minor Components

- Hymas soils in convex areas on backslopes (3 percent)
- Northwater soils on north- and east-facing slopes (3 percent)
- Calpac soils on smooth slopes (2 percent)
- Rock outcrop on ridges (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Water erosion and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Use of equipment is limited by slope.
- After seeding, defer grazing until young plants are well established.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Povey and Hades—Loamy, 16- to 22-inch precipitation zone; Hondoho—Steep Slope, 16- to 22-inch precipitation zone

92—Povey-Ireland-Calpac association, 30 to 70 percent slopes

Composition

Povey and similar soils—45 percent
Ireland and similar soils—25 percent
Calpac and similar soils—15 percent
Minor components—15 percent

Setting

Landform: Mountains and ridges
Elevation: 5,200 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 20 inches
Air temperature—about 41 degrees F
Frost-free period—60 to 90 days

Characteristics of Povey

Position on landscape: North- and east-facing slopes
Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Ireland

Position on landscape: Convex, south-facing slopes
Typical profile:
0 to 8 inches—grayish brown very gravelly silt loam
8 to 28 inches—grayish brown and brown extremely cobbly silt loam
28 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 2 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Calpac

Position on landscape: Concave slopes
Typical profile:
0 to 8 inches—dark brown gravelly silt loam
8 to 15 inches—dark brown very gravelly silt loam

15 to 23 inches—brown extremely cobbly silt loam
23 to 60 inches—brown extremely cobbly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hymas soils on ridges and convex slopes (5 percent)
- Pavohroo soils on concave slopes (5 percent)
- Ridgecrest soils on northeast-facing slopes (3 percent)
- Northwater soils on concave, northeast-facing slopes (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, water erosion, and slope.
- Uniform distribution of grazing is difficult because of the slope or lack of permanent water developments, or both.
- Production is limited mainly by the restricted available water capacity.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

93—Povey-Pavohroo association, 30 to 60 percent slopes

Composition

Povey and similar soils—45 percent
Pavohroo and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Mountains
Elevation: 5,000 to 7,700 feet
Climatic data (mean annual):
Precipitation—about 20 inches
Air temperature—about 40 degrees F
Frost-free period—40 to 70 days

Characteristics of Povey

Position on landscape: East-facing slopes

Typical profile:
0 to 5 inches—dark grayish brown gravelly loam
5 to 20 inches—grayish brown and brown very cobbly loam
20 to 35 inches—yellowish brown very gravelly sandy loam
35 to 60 inches—brown extremely gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 6.4 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Pavohroo

Position on landscape: North- and east-facing slopes
Typical profile:
0 to 1 inch—slightly decomposed plant material
1 to 7 inches—dark brown gravelly silt loam
7 to 16 inches—brown silt loam
16 to 39 inches—brown and light yellowish brown gravelly silt loam
39 to 61 inches—light yellowish brown gravelly clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 10.3 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hymas soils on concave, north-facing slopes at high elevations (10 percent)
- Ireland soils on convex, east- and southeast-facing slopes (5 percent)
- Soils that have slopes of less than 30 percent (5 percent)
- Hondoho soils on lower lying slopes (3 percent)
- Rock outcrop on ridges (2 percent)

Use and Management

Major use: Rangeland (fig. 8)
Major management factors: Water erosion and slope
Dominant vegetation in natural potential plant community: Povey—mountain big sagebrush and bluebunch wheatgrass; Pavohroo—quaking aspen
General management considerations:
- Seeding of adapted species to improve the range is limited by water erosion and slope.
- Uniform distribution of grazing is difficult because of the slope or the lack of permanent water developments, or both.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Povey—Steep Slope, 16- to 22-inch precipitation zone; Pavohroo—Moist Mountain Loam, 20+-inch precipitation zone

Figure 8.—Typical area of Povey-Pavohroo association, 30 to 60 percent slopes. The Elkhorn Mountains are in background.

94—Povirt silty clay loam, 0 to 2 percent slopes

Composition

Povirt and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Relict lakebeds
Elevation: 4,900 to 5,200 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free season—80 to 100 days

Characteristics of Povirt

Typical profile:
0 to 10 inches—light brownish gray silty clay loam
10 to 60 inches—light brownish gray and light gray silty clay
Depth class: Very deep
Drainage class: Poorly drained
Permeability: Impermeable
Available water capacity: 9.8 inches
Potential rooting depth: Water-tolerant plants—60 inches or more; non-water-tolerant plants—0 to 18 inches
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate
Depth to seasonal perched water table: 12 inches above the surface to a depth of 18 inches below the surface in April through June

Frequency of ponding: Frequent; areas of this soil in Pocatello Valley are covered with water as a result of snowmelt in closed basins
Frequency of flooding: Rare

Minor Components

- Bothwell soils on slightly higher lying lake terraces (10 percent)
- Elevator soils on low lake terraces (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, permeability, wetness, ponding, and wind erosion
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Seasonal ponding limits the production and harvesting of crops.
- The seasonal high water table provides supplemental moisture for plants.
- Minimize the risk of erosion by maintaining crop residue on the soil surface, limiting the number of tillage operations, and planting crops in narrow strips at right angles to the prevailing wind.

Interpretive Groups

Land capability classification: 3w, nonirrigated

95—Raldridge gravelly loam, 4 to 12 percent slopes

Composition

Raldridge and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Hills
Elevation: 4,600 to 5,100 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 40 degrees F
Frost-free period—120 to 130 days

Characteristics of Raldridge

Typical profile:
0 to 3 inches—dark grayish brown gravelly loam
3 to 14 inches—dark grayish brown gravelly silty clay loam
14 to 22 inches—grayish brown very gravelly clay loam
22 to 60 inches—light gray and very pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 5.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- DeJarnet soils on smooth to concave terraces (5 percent)
- Rock outcrop on shoulders (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)
- Soils that are on midslopes and have more than 35 percent gravel in the subsoil (10 percent)

Use and Management

Major uses: Rangeland and nonirrigated cropland
Major management factors: Rock fragments on the surface, water erosion, and slope

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Production is limited mainly by the low precipitation during the growing season.

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Because of the limited precipitation, this unit is not suited to continuous cropping.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion, maintain tilth, and increase the water intake rate by constructing terraces, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

96—Rexburg silt loam, 1 to 4 percent slopes

Composition

Rexburg and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 5,100 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Rexburg

Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained

Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Arbone soils on convex slopes (1 percent)
- Lanoak soils on concave slopes and in depressions (10 percent)
- Thatcher soils on smooth to concave slopes (2 percent)
- Toefoot soils on smooth slopes (2 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Growing season and depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3e, irrigated, and 3c, nonirrigated

97—Rexburg-Arbone-Ririe complex, 4 to 12 percent slopes

Composition

Rexburg and similar soils—50 percent
Arbone and similar soils—25 percent
Ririe and similar soils—15 percent
Minor components—10 percent

Setting

Landform: Fan remnants (fig. 9)
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Figure 9.—Typical area of Rexburg silt loam in an area of Rexburg-Arbone-Ririe complex, 4 to 12 percent slopes. Rexburg-Arbone-Ririe complex, 12 to 25 percent slopes, is in background.

Characteristics of Rexburg

Position on landscape: Convex or smooth slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Arbone

Position on landscape: Convex slopes
Typical profile:
0 to 15 inches—grayish brown and brown silt loam
15 to 60 inches—brown gravelly silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Ririe

Position on landscape: Convex slopes

Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Hondoho soils on convex ridges (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Soils that have an average of more than 18 percent clay in the subsoil and are on toeslopes in Arbon Valley (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland, and rangeland
Major management factors: Growing season, depth to carbonates, water erosion, and slope in some areas

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Reduce the risk of water erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

98—Rexburg-Arbone-Ririe complex, 12 to 25 percent slopes

Composition

Rexburg and similar soils—40 percent
Arbone and similar soils—35 percent
Ririe and similar soils—15 percent
Minor components—10 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Rexburg

Position on landscape: Convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Arbone

Position on landscape: Convex slopes
Typical profile:
0 to 15 inches—grayish brown and brown gravelly silt loam
15 to 60 inches—brown gravelly silt loam and very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Ririe

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches

Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Hondoho soils on convex ridges (5 percent)
- Soils that have slopes of less than 12 percent or more than 25 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by water erosion.

Interpretive Groups

Land capability classification: 4e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

99—Rexburg-Iphil-Watercanyon complex, 12 to 30 percent slopes

Composition

Rexburg and similar soils—30 percent
Iphil and similar soils—25 percent
Watercanyon and similar soils—25 percent
Minor components—20 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 115 days

Characteristics of Rexburg

Position on landscape: Slightly concave or smooth slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Iphil

Position on landscape: Convex or smooth slopes
Typical profile:
0 to 10 inches—brown silt loam
10 to 36 inches—light gray and very pale brown silt loam
36 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Watercanyon

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—pale brown silt loam
5 to 33 inches—pale brown and very pale brown silt loam
33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Kucera soils on concave slopes (10 percent)
- Ririe soils on smooth or convex slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Depth to carbonates, water erosion, and slope
Suitable crops: Wheat and barley

General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 6e, nonirrigated

100—Rexburg-Lanoak complex, 4 to 12 percent slopes

Composition

Rexburg and similar soils—55 percent
Lanoak and similar soils—35 percent
Minor components—10 percent

Setting

Landform: Hills and fan remnants
Elevation: 5,100 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Rexburg

Position on landscape: Convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—light brownish gray and pale brown silt loam
22 to 60 inches—light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Lanoak

Position on landscape: Concave slopes and depressions
Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Buist soils on ridges (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Iphil soils on convex slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, limiting the number of tillage operations, and maintaining crop residue on the soil surface.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3e, nonirrigated

101—Rexburg-Lanoak complex, 12 to 25 percent slopes

Composition

Rexburg and similar soils—55 percent
Lanoak and similar soils—35 percent
Minor components—10 percent

Setting

Landform: Hills and fan remnants
Elevation: 5,100 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Rexburg

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—light brownish gray and pale brown silt loam
22 to 60 inches—light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more

Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Lanoak

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Soils that are on smooth or convex slopes and have a hardpan at a depth of 10 to 30 inches (5 percent)
- Soils that have slopes of less than 12 percent or more than 25 percent (3 percent)
- Arbone soils on ridges and south-facing slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 4e, nonirrigated

102—Rexburg-Lanoak-Watercanyon complex, 4 to 12 percent slopes

Composition

Rexburg and similar soils—35 percent
Lanoak and similar soils—25 percent

Watercanyon and similar soils—20 percent
Minor components—20 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 6,000 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 43 degrees F
  Frost-free period—80 to 115 days

Characteristics of Rexburg

Position on landscape: Smooth or slightly convex slopes
Typical profile:
  0 to 14 inches—grayish brown silt loam
  14 to 22 inches—brown silt loam
  22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Lanoak

Position on landscape: Concave slopes
Typical profile:
  0 to 30 inches—grayish brown and brown silt loam
  30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Watercanyon

Position on landscape: Convex slopes
Typical profile:
  0 to 5 inches—pale brown silt loam
  5 to 33 inches—pale brown and very pale brown silt loam
  33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Soils that are on smooth or convex slopes in the hills east of Dairy Creek and are underlain by consolidated tuff (10 percent)
- Arbone soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Small areas of Rock outcrop on shoulders (2 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Depth to carbonates in some areas, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 3e, nonirrigated

103—Rexburg-Ririe-Kucera complex, 2 to 8 percent slopes

Composition

Rexburg and similar soils—50 percent
Ririe and similar soils—20 percent
Kucera and similar soils—15 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,400 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Rexburg

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches

Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Ririe

Position on landscape: Slightly convex or smooth slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Kucera

Position on landscape: Concave slopes
Typical profile:
0 to 22 inches—dark grayish brown and brown silt loam
22 to 42 inches—pale brown silt loam
42 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Cedarhill soils on concave slopes in depressions (5 percent)
- Soils that are in broad depressions and average more than 15 percent gravel in the subsoil (5 percent)
- Soils that have slopes of less than 2 percent or more than 8 percent (3 percent)
- Watercanyon soils on south-facing, convex slopes (2 percent)

Use and Management

Major uses: Nonirrigated and irrigated cropland (fig. 10) and hayland
Major management factors: Growing season, depth to carbonates in some areas, and water erosion

Nonirrigated and irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Figure 10.—Nonirrigated grain on Ririe silt loam in an area of Rexburg-Ririe-Kucera complex, 2 to 8 percent slopes.

Nonirrigated and irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: Rexburg—3e, irrigated and nonirrigated; Ririe and Kucera—4e, irrigated, and 3e, nonirrigated

104—Rexburg-Thatcher-Ririe complex, 12 to 30 percent slopes

Composition

Rexburg and similar soils—40 percent
Thatcher and similar soils—25 percent
Ririe and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,700 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Rexburg

Position on landscape: Smooth or slightly convex slopes
Typical profile:
 0 to 14 inches—grayish brown silt loam
 14 to 22 inches—grayish brown and brown silt loam
 22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Thatcher

Position on landscape: Concave slopes
Typical profile:
 0 to 7 inches—grayish brown silt loam
 7 to 35 inches—yellowish brown and light yellowish brown silty clay loam
 35 to 60 inches—light yellowish brown and pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 9.5 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Ririe

Position on landscape: Slightly convex or smooth slopes
Typical profile:
 0 to 14 inches—brown silt loam
 14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium to very high
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on steep slopes and in depressions (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)
- Lanoak soils on concave slopes (3 percent)
- Hondoho soils on concave slopes (2 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, water erosion, and slope
Suitable crops: Wheat and barley

General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 6e, nonirrigated

105—Rexburg-Watercanyon-Lanoak complex, 12 to 20 percent slopes

Composition

Rexburg and similar soils—35 percent
Watercanyon and similar soils—30 percent
Lanoak and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 115 days

Characteristics of Rexburg

Position on landscape: Smooth or slightly convex slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Watercanyon

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—pale brown silt loam
5 to 33 inches—pale brown and very pale brown silt loam
33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate

Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Lanoak

Position on landscape: Concave slopes
Typical profile:
0 to 30 inches—grayish brown and brown silt loam
30 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Soils that are on smooth to convex slopes in the hills east of Dairy Creek and are underlain by consolidated tuff (5 percent)
- Hondoho soils on concave slopes (3 percent)
- Arbone soils on slightly convex slopes (2 percent)
- Rock outcrop on convex shoulders (2 percent)
- Soils that have slopes of less than 12 percent or more than 20 percent (2 percent)
- Cedarhill soils near depressions (1 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Depth to carbonates, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall and by returning crop residue to the soil.

Interpretive Groups

Land capability classification: 4e, nonirrigated

106—Ridgecrest-Hondoho complex, 30 to 60 percent slopes

Composition

Ridgecrest and similar soils—45 percent
Hondoho and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Mountains
Elevation: 5,200 to 7,000 feet

Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Ridgecrest

Position on landscape: Convex slopes
Typical profile:
0 to 9 inches—grayish brown very gravelly silt loam
9 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly silt loam and very cobbly loam
31 to 35 inches—very pale brown, calcareous extremely cobbly sandy loam
35 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 3.6 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 28 inches—pale brown very cobbly silt loam
28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hades soils on convex slopes (5 percent)
- Hymas soils on ridges (5 percent)
- Small areas of Rock outcrop on shoulders (5 percent)
- Soils that have slopes of less than 30 percent (3 percent)
- Calpac soils on concave slopes (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by rock fragments on the surface, water erosion, and slope.
- The use of forage by livestock is limited by the irregular distribution of desirable forage and the lack of permanent water developments.

- Production is limited mainly by the restricted available water capacity in some areas.
- Use of equipment is limited by slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

107—Ridgecrest-Hondoho-Hymas association, 30 to 60 percent slopes

Composition

Ridgecrest and similar soils—35 percent
Hondoho and similar soils—30 percent
Hymas and similar soils—15 percent
Minor components—20 percent

Setting

Landform: Mountains and ridges
Elevation: 5,000 to 7,500 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Ridgecrest

Position on landscape: North- and east-facing slopes
Typical profile:
0 to 9 inches—grayish brown very gravelly silt loam
9 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly silt loam and very cobbly loam
31 to 35 inches—very pale brown extremely cobbly sandy loam
35 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 3.6 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: South- and west-facing slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 28 inches—pale brown very cobbly loam
28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hymas

Position on landscape: Convex slopes
Typical profile:
0 to 2 inches—grayish brown very cobbly loam
2 to 7 inches—brown very cobbly silt loam
7 to 11 inches—pale brown extremely cobbly loam
11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Calpac soils on concave slopes (5 percent)
- Lizdale soils on toeslopes (5 percent)
- Pavohroo soils on convex slopes (5 percent)
- Ireland soils on ridges (3 percent)
- Small areas of Rock outcrop on shoulders (2 percent)

Use and Management

Major use: Rangeland
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Ridgecrest and Hondoho—mountain big sagebrush and bluebunch wheatgrass; Hymas—low sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, available water capacity in some areas, rock fragments on the surface, water erosion, and slope.
- The use of forage by livestock is limited by the irregular distribution of desirable forage and the lack of permanent water developments.
- Production is limited mainly by the depth to bedrock and restricted available water capacity in some areas.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: Ridgecrest and Hondoho—7e, nonirrigated; Hymas—7s, nonirrigated
Ecological site: Ridgecrest and Hondoho—Steep Slope, 16- to 22-inch precipitation zone; Hymas—Shallow Stony, 12- to 16-inch precipitation zone

108—Ridgecrest-Hondoho-Lizdale association, 30 to 60 percent slopes

Composition

Ridgecrest and similar soils—35 percent
Hondoho and similar soils—30 percent
Lizdale and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Mountains
Elevation: 4,800 to 7,000 feet
Climatic data (mean annual):
  Precipitation—about 16 inches
  Air temperature—about 43 degrees F
  Frost-free period—about 85 days

Characteristics of Ridgecrest

Position on landscape: North- and east-facing slopes
Typical profile:
  0 to 9 inches—grayish brown very gravelly silt loam
  9 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly silt loam and very cobbly loam
  31 to 35 inches—very pale brown extremely cobbly sandy loam
  35 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 3.6 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: South- and west-facing slopes
Typical profile:
  0 to 14 inches—grayish brown gravelly silt loam
  14 to 28 inches—pale brown very cobbly loam
  28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Lizdale

Position on landscape: Slightly concave slopes
Typical profile:
  0 to 7 inches—dark grayish brown very gravelly silt loam
  7 to 36 inches—brown very gravelly loam and pink very gravelly sandy loam
  36 to 60 inches—light brown extremely gravelly sandy loam and extremely gravelly loamy sand
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hades soils on concave slopes (5 percent)
- Hymas soils on convex slopes near shoulders (5 percent)
- Small areas of Rock outcrop on shoulders (5 percent)

Use and Management

Major use: Rangeland
Major management factors: Rock fragments on the surface, available water capacity in some areas, water erosion, and slope
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:

- Seeding of adapted species to improve the range is limited by rock fragments on the surface, water erosion, and slope.
- The use of forage by livestock is limited by the irregular distribution of desirable forage and the lack of permanent water developments.
- Production is limited mainly by the restricted available water capacity in some areas.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: 7e, nonirrigated
Ecological site: Steep Slope, 16- to 22-inch precipitation zone

109—Ridgecrest-Hymas association, 30 to 60 percent slopes

Composition

Ridgecrest and similar soils—45 percent
Hymas and similar soils—30 percent
Minor components—25 percent

Setting

Landform: Mountains and ridges
Elevation: 5,000 to 7,500 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 90 days

Characteristics of Ridgecrest

Position on landscape: Convex slopes of mountains
Typical profile:
0 to 9 inches—grayish brown very gravelly silt loam
9 to 31 inches—grayish brown, yellowish brown, and light yellowish brown very cobbly silt loam and very cobbly loam
31 to 35 inches—very pale brown extremely cobbly sandy loam
35 inches—highly fractured limestone
Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate

Available water capacity: 3.6 inches
Restriction to rooting depth: Bedrock at a depth of 20 to 40 inches
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Hymas

Position on landscape: Convex slopes of ridges
Typical profile:
0 to 2 inches—grayish brown very cobbly loam
2 to 7 inches—brown very cobbly silt loam
7 to 11 inches—pale brown extremely cobbly loam
11 inches—highly fractured limestone
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 1.2 inches
Restriction to rooting depth: Bedrock at a depth of 10 to 20 inches
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on convex slopes (10 percent)
- Hondoho soils on concave slopes (10 percent)
- Lizdale soils on toeslopes (3 percent)
- Small areas of Rock outcrop on shoulders (2 percent)

Use and Management

Major use: Rangeland (fig. 11)
Major management factors: Depth to bedrock in some areas, rock fragments on the surface, available water capacity, water erosion, and slope

Figure 11.—Typical area of Ridgecrest-Hymas association, 30 to 60 percent slopes. Hymas very cobbly loam is left of the draw, and Ridgecrest very gravelly silt loam is right of the draw.

Dominant vegetation in natural potential plant community: Ridgecrest—mountain big sagebrush and bluebunch wheatgrass; Hymas—Utah juniper, mountain big sagebrush, and bluebunch wheatgrass

General management considerations:

- Seeding of adapted species to improve the range is limited by the depth to bedrock in some areas, rock fragments on the surface, water erosion, and slope.
- The use of forage by livestock is limited by the irregular distribution of desirable forage and the lack of permanent water developments.
- Production is limited mainly by the depth to bedrock in some areas and the restricted available water capacity.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: Ridgecrest—7e, nonirrigated; Hymas—7s, nonirrigated

Ecological site: Ridgecrest—Steep Slope, 16- to 22-inch precipitation zone; Hymas—Shallow Juniper Breaks, 13- to 16-inch precipitation zone

110—Ririe-Buist complex, 4 to 12 percent slopes

Composition

Ririe and similar soils—50 percent
Buist and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 6,000 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 95 days

Characteristics of Ririe

Position on landscape: Slightly concave slopes
Typical profile:
0 to 14 inches—brown silt loam
14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Buist

Position on landscape: Convex slopes
Typical profile:
0 to 15 inches—brown gravelly silt loam
15 to 28 inches—brown very gravelly loam
28 to 60 inches—very pale brown extremely gravelly fine sandy loam
Depth class: Very deep
Drainage class: Well drained

Permeability: Moderate
Available water capacity: 5.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Soils that are on convex slopes and average more than 18 percent clay in the subsoil (10 percent)
- Kucera soils on east- and north-facing, concave slopes and backslopes (5 percent)
- Soils that have a cemented horizon at a depth of 20 to 40 inches (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Iphil soils on east-facing, smooth slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 13- to 16-inch precipitation zone

111—Ririe-Cedarhill complex, 4 to 12 percent slopes

Composition

Ririe and similar soils—50 percent
Cedarhill and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 6,500 feet

Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Ririe

Position on landscape: Slightly concave or smooth slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 60 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Cedarhill

Position on landscape: Convex slopes
Typical profile:
0 to 7 inches—grayish brown gravelly silt loam
7 to 12 inches—grayish brown gravelly loam
12 to 27 inches—light brownish gray very gravelly loam
27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Lostine soils on east-facing, slightly concave slopes (10 percent)
- Justesen soils on concave slopes (5 percent)
- Kucera soils on east- and north-facing, concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Suitable crop: Wheat
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by constructing terraces,

chiseling stubble fields on the contour or across the slope in fall, limiting the number of tillage operations, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 3e, nonirrigated

112—Ririe-Cedarhill complex, 12 to 20 percent slopes

Composition

Ririe and similar soils—50 percent
Cedarhill and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 6,500 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 43 degrees F
  Frost-free period—70 to 100 days

Characteristics of Ririe

Position on landscape: Slightly concave or smooth slopes
Typical profile:
  0 to 14 inches—brown silt loam
  14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Cedarhill

Position on landscape: Convex slopes
Typical profile:
  0 to 7 inches—grayish brown gravelly silt loam
  7 to 12 inches—grayish brown gravelly loam
  12 to 27 inches—light brownish gray very gravelly loam
  27 to 60 inches—very pale brown extremely cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Justesen soils on concave slopes (10 percent)
- Lostine soils on east-facing, slightly concave slopes (10 percent)
- Soils that have slopes of less than 12 percent or more than 20 percent (3 percent)
- Kucera soils on east- and north-facing, concave slopes (2 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, available water capacity in some areas, water erosion, and slope
Suitable crop: Wheat
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion and conserve moisture by chiseling stubble fields on the contour or across the slope in fall, limiting the number of tillage operations, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 4e, nonirrigated

113—Ririe-Hondoho complex, 12 to 20 percent slopes

Composition

Ririe and similar soils—50 percent
Hondoho and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 6,700 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Ririe

Position on landscape: Slightly concave or smooth slopes
Typical profile:
0 to 14 inches—brown silt loam
14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Characteristics of Hondoho

Position on landscape: Convex slopes
Typical profile:
0 to 14 inches—grayish brown gravelly silt loam
14 to 28 inches—pale brown very cobbly loam

28 to 60 inches—very pale brown very cobbly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 5.8 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Arbone soils on east- and south-facing, convex slopes (10 percent)
- Iphil soils on east-facing, convex slopes (5 percent)
- Soils that have a cemented layer at a depth of 20 to 40 inches (5 percent)
- Soils that have slopes of less than 12 percent or more than 20 percent (3 percent)
- Kucera soils on east- and north-facing, concave slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface in some areas, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: Ririe—4e, nonirrigated; Hondoho—3e, nonirrigated

114—Ririe-Iphil-Kucera complex, 2 to 8 percent slopes

Composition

Ririe and similar soils—40 percent
Iphil and similar soils—25 percent
Kucera and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,400 to 5,900 feet

Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 100 days

Characteristics of Ririe

Slope: 2 to 6 percent
Position on landscape: Slightly concave or smooth slopes
Typical profile:
0 to 14 inches—brown silt loam
14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Iphil

Slope: 2 to 8 percent
Position on landscape: Convex slopes
Typical profile:
0 to 10 inches—brown silt loam
10 to 36 inches—light gray and very pale brown silt loam
36 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Kucera

Slope: 2 to 8 percent
Position on landscape: Slightly concave slopes
Typical profile:
0 to 22 inches—dark grayish brown and brown silt loam
22 to 42 inches—pale brown silt loam
42 to 60 inches—very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Arbone soils in broad depressions (10 percent)
- Soils that have slopes of less than 2 percent or more than 8 percent (3 percent)
- Cedarhill soils on concave slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates in some areas, and water erosion

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3e, nonirrigated

115—Ririe-Iphil-Rexburg complex, 4 to 12 percent slopes

Composition

Ririe and similar soils—30 percent
Iphil and similar soils—25 percent
Rexburg and similar soils—25 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Ririe

Position on landscape: Slightly concave or smooth slopes
Typical profile:
0 to 14 inches—brown silt loam
14 to 60 inches—pale brown and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Iphil

Position on landscape: Convex slopes
Typical profile:
0 to 10 inches—brown silt loam
10 to 36 inches—light gray and very pale brown silt loam
36 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Rexburg

Position on landscape: Concave slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 62 inches—brown, light brownish gray, and yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Cedarhill soils on concave slopes (10 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)
- Watercanyon soils on south-facing, convex slopes (5 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay,

conservation practices such as managing nutrients and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 3e, nonirrigated

116—Ririe-Rexburg complex, 4 to 12 percent slopes

Composition

Ririe and similar soils—45 percent
Rexburg and similar soils—40 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 5,000 to 5,400 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 100 days

Characteristics of Ririe

Position on landscape: Smooth or convex slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Rexburg

Position on landscape: Concave or smooth slopes
Typical profile:
0 to 14 inches—grayish brown silt loam
14 to 22 inches—brown silt loam
22 to 60 inches—light gray and very pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Kucera soils on east-, west-, and north-facing, concave slopes (5 percent)
- Lostine soils on east- and north-facing, smooth or slightly concave slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)

• Cedarhill soils on east- and south-facing, convex slopes (2 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 4e, irrigated, and 3e, nonirrigated

117—Ririe-Watercanyon complex, 4 to 12 percent slopes

Composition

Ririe and similar soils—50 percent
Watercanyon and similar soils—25 percent
Minor components—25 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 115 days

Characteristics of Ririe

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Watercanyon

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—pale brown silt loam
5 to 33 inches—pale brown and very pale brown silt loam
33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Calcareous soils that are on smooth to convex slopes of the hills east of Dairy Creek and are underlain by consolidated tuff (10 percent)
- Arbone soils on south-facing slopes and in depressions (5 percent)
- Rexburg soils on convex slopes (5 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (5 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Ririe—Loamy, 13- to 16-inch precipitation zone; Watercanyon—Shallow Loamy, 13- to 16-inch precipitation zone

118—Ririe-Watercanyon complex, 12 to 30 percent slopes

Composition

Ririe and similar soils—45 percent
Watercanyon and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Fan remnants and hills
Elevation: 5,000 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 15 inches
Air temperature—about 44 degrees F
Frost-free period—70 to 115 days

Characteristics of Ririe

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 14 inches—grayish brown and brown silt loam
14 to 63 inches—very pale brown and light yellowish brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 12.6 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Watercanyon

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—pale brown silt loam
5 to 33 inches—pale brown and very pale brown silt loam
33 to 62 inches—very pale brown very fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.9 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Calcareous soils that are on smooth or convex slopes of the hills east of Dairy Creek and are underlain by consolidated tuff (10 percent)
- Arbone soils on south-facing slopes and in depressions (5 percent)

- Soils that have slopes of less than 12 percent or more than 30 percent (3 percent)
- Rexburg soils on convex slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall and by maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management consideration:
- Seeding of adapted species to improve the range is limited by water erosion.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Ririe—Loamy, 13- to 16-inch precipitation zone; Watercanyon—Shallow Loamy, 13- to 16-inch precipitation zone

119—Samaria silt loam, 0 to 4 percent slopes

Composition

Samaria and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,500 to 5,300 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Samaria

Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 16 inches—brown gravelly silt loam
16 to 27 inches—light brownish gray and very pale brown gravelly loam
27 to 64 inches—light gray and very pale brown gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7.7 inches

Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Ecur soils on convex slopes (5 percent)
- Soils that are on concave slopes and are noncalcareous (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland
Major management factor: Depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3c, irrigated and nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

120—Samaria silt loam, 4 to 8 percent slopes

Composition

Samaria and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Lake terraces
Elevation: 4,500 to 5,300 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 120 days

Characteristics of Samaria

Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 16 inches—brown gravelly silt loam
16 to 27 inches—light brownish gray and very pale brown gravelly loam
27 to 64 inches—light gray and very pale brown gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Ecur soils on convex slopes (5 percent)
- Soils that are on concave slopes and are noncalcareous (2 percent)
- Soils that have slopes of less than 4 percent or more than 8 percent (3 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland, and rangeland
Major management factors: Depth to carbonates and water erosion

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and returning crop residue to the soil.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, irrigated and nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

121—Samaria-Pollynot complex, 4 to 12 percent slopes

Composition

Samaria and similar soils—55 percent
Pollynot and similar soils—30 percent
Minor components—15 percent

Setting

Landform: Fan remnants and lake terraces
Elevation: 4,300 to 5,300 feet
Climatic data (mean annual):
  Precipitation—about 15 inches
  Air temperature—about 47 degrees F
  Frost-free period—100 to 120 days

Characteristics of Samaria

Position on landscape: Slightly convex or smooth slopes
Typical profile:
  0 to 5 inches—grayish brown silt loam
  5 to 16 inches—brown gravelly silt loam
  16 to 27 inches—light brownish gray and very pale brown gravelly loam
  27 to 64 inches—light gray and very pale brown gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Pollynot

Position on landscape: Slightly convex or smooth slopes
Typical profile:
  0 to 7 inches—grayish brown silt loam
  7 to 17 inches—grayish brown silt loam
  17 to 41 inches—pale brown silt loam and loam
  41 to 56 inches—light gray very gravelly sandy loam
  56 to 60 inches—light gray extremely gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Highcreek soils on smooth or very slightly concave slopes (10 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Parleys soils on smooth or convex slopes (2 percent)

Use and Management

Major uses: Nonirrigated cropland and hayland, and rangeland
Major management factors: Depth to carbonates, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as managing nutrients and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Samaria—Loamy, 11- to 13-inch precipitation zone; Pollynot—Loamy, 12- to 16-inch precipitation zone

122—Samaria-Sterling complex, 4 to 12 percent slopes

Composition

Samaria and similar soils—50 percent
Sterling and similar soils—35 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,500 to 5,500 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Samaria

Position on landscape: Convex slopes
Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 16 inches—brown gravelly silt loam
16 to 27 inches—light brownish gray and very pale brown gravelly loam
27 to 64 inches—light gray and very pale brown gravelly sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate

Available water capacity: 7.7 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Characteristics of Sterling

Position on landscape: Concave slopes
Typical profile:
0 to 13 inches—brown very gravelly loam
13 to 66 inches—pale brown and very pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Kearns soils on lower fan remnants (10 percent)
- Soils that have slopes of less than 4 percent or more than 12 percent (3 percent)
- Highcreek soils on higher lying fan remnants (2 percent)

Use and Management

Major uses: Rangeland and nonirrigated cropland
Major management factors: Depth to carbonates, rock fragments on the surface in some areas, water erosion, and slope

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Equipment is limited by the rock fragments on the surface in some areas.

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface in some areas make seedbed preparation difficult.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Samaria—Loamy, 11- to 13-inch precipitation zone; Sterling—Loamy, 12- to 16-inch precipitation zone

123—Sterling very gravelly loam, 12 to 20 percent slopes

Composition

Sterling and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Fan remnants and hills
Elevation: 4,500 to 5,500 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 120 days

Characteristics of Sterling

Typical profile:
0 to 13 inches—brown very gravelly loam
13 to 66 inches—pale brown and very pale brown very gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 4.9 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—severe

Minor Components

- Highcreek soils on upper slopes (5 percent)
- Samaria soils on lower slopes (10 percent)
- Soils that have slopes of less than 12 percent or more than 20 percent (5 percent)

Use and Management

Major uses: Rangeland and nonirrigated cropland
Major management factors: Depth to carbonates, rock fragments on the surface, water erosion, and slope

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season, rock fragments on the surface, and water erosion.
- After seeding, defer grazing until young plants are well established.
- Production is limited mainly by the low precipitation during the growing season.
- The use of equipment is limited by the rock fragments on the surface.

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- Continuous cropping is not suitable because of the limited precipitation.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 12- to 16-inch precipitation zone

124—Thatcher silt loam, 4 to 12 percent slopes

Composition

Thatcher and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,700 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Thatcher

Typical profile:
0 to 7 inches—grayish brown silt loam
7 to 35 inches—yellowish brown and light yellowish brown silty clay loam
35 to 60 inches—light yellowish brown and pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 9.5 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Broadhead soils in depressions (5 percent)
- Small areas of soils in the Samaria and Cherry Creek areas that have slopes of less than 4 percent (5 percent)
- Soils in depressions that are calcareous to the surface (5 percent)

Use and Management

Major uses: Nonirrigated and irrigated cropland, irrigated hayland, and building site development
Major management factors: Growing season, permeability, water erosion, and slope

Nonirrigated and irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.

- Minimize the risk of erosion by constructing terraces, returning crop residue to the soil, and limiting the number of tillage operations.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Building site development
General management considerations:
- Septic tank absorption fields can be expected to function poorly because of the restricted permeability of the soil.
- Absorption lines should be installed below the layer that has restricted permeability.

Interpretive Groups

Land capability classification: 4e, irrigated and nonirrigated

125—Thatcher-Jensen complex, 12 to 30 percent slopes

Composition

Thatcher and similar soils—45 percent
Jensen and similar soils—35 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 4,700 to 5,900 feet
Climatic data (mean annual):
Precipitation—about 16 inches
Air temperature—about 43 degrees F
Frost-free period—80 to 100 days

Characteristics of Thatcher

Position on landscape: Convex slopes
Typical profile:
0 to 7 inches—grayish brown silt loam
7 to 35 inches—yellowish brown and light yellowish brown silty clay loam
35 to 60 inches—light yellowish brown and pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 9.5 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Characteristics of Jensen

Position on landscape: Convex or slightly concave slopes
Typical profile:
0 to 12 inches—grayish brown silt loam

12 to 45 inches—brown and pale brown gravelly silt loam
45 to 60 inches—pale brown very gravelly loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.2 inches
Potential rooting depth: 60 inches or more
Runoff: High
Hazard of erosion: By water—severe

Minor Components

- Lostine soils on north-facing slopes (10 percent)
- Hondoho soils on upper slopes (5 percent)
- Soils that have slopes of less than 12 percent or more than 30 percent (5 percent)

Use and Management

Major use: Nonirrigated cropland
Major management factors: Growing season, water erosion, and slope
Suitable crops: Wheat and barley
General management considerations:

- The short growing season limits the choice of crops.
- Minimize the risk of erosion by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Interpretive Groups

Land capability classification: Thatcher—6e, nonirrigated; Jensen—4e, nonirrigated

126—Freedom silt loam, 0 to 4 percent slopes

Composition

Freedom and similar soils—75 percent
Minor components—25 percent

Setting

Landform: Lake terraces
Elevation: 4,300 to 4,600 feet
Climatic data (mean annual):
Precipitation—about 10 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 110 days

Characteristics of Freedom

Typical profile:
0 to 13 inches—light brownish gray silt loam
13 to 34 inches—light gray silt loam
34 to 60 inches—light gray silt loam

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more

Runoff: Low
Hazard of erosion: By water—slight; by wind—moderate

Minor Components

- Ecur soils in depressions (5 percent)
- Mellor soils in depressions (10 percent)
- Tickason soils in narrow depressions (10 percent)

Use and Management

Major uses: Irrigated cropland, hayland, and pastureland, and rangeland
Major management factors: Depth to carbonates and wind erosion

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated hayland and pastureland
Suitable crops: Alfalfa hay and pasture
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season and by wind erosion.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: 3s, irrigated, and 6s, nonirrigated
Ecological site: Loamy, 8- to 11-inch precipitation zone

127—Tickason very fine sandy loam, 0 to 2 percent slopes

Composition

Tickason and similar soils—80 percent
Minor components—20 percent

Setting

Landform: Fan remnants
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 12 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 130 days

Characteristics of Tickason

Typical profile:
0 to 10 inches—grayish brown very fine sandy loam
10 to 23 inches—pale brown fine sandy loam
23 to 31 inches—very pale brown very fine sandy loam
31 to 38 inches—very pale brown fine sandy loam
38 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.4 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate

Minor Components

- Ecur soils on terrace shoulders (10 percent)
- Hillfield soils on terrace shoulders (5 percent)
- Soils that are on smooth to concave slopes and have a thick, dark-colored surface layer more than 20 inches thick (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland, irrigated hayland, and rangeland
Major management factors: Depth to carbonates and wind erosion

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland

Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass

General management considerations:

- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season and by wind erosion.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: 2c, irrigated, and 4c, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

128—Tickason very fine sandy loam, 2 to 4 percent slopes

Composition

Tickason and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,400 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 12 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 130 days

Characteristics of Tickason

Typical profile:
0 to 10 inches—grayish brown very fine sandy loam
10 to 23 inches—pale brown fine sandy loam
23 to 31 inches—very pale brown very fine sandy loam
31 to 38 inches—very pale brown fine sandy loam
38 to 60 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9.4 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight; by wind—moderate

Minor Components

- Kearns soils in depressions (5 percent)
- Neeley soils on convex slopes (10 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland, irrigated hayland, and rangeland
Major management factors: Depth to carbonates and wind erosion

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Reduce the risk of wind erosion by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management considerations:
- The limitations for use as rangeland are minimal if proper grazing management is used.
- Seeding of adapted species to improve the range is limited by the low precipitation during the growing season and by wind erosion.
- Production is limited mainly by the low precipitation during the growing season.

Interpretive Groups

Land capability classification: 2e, irrigated, and 4c, nonirrigated
Ecological site: Loamy, 11- to 13-inch precipitation zone

129—Tirod silt loam, 0 to 2 percent slopes

Composition

Tirod and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 4,300 to 5,000 feet
Climatic data (mean annual):
Precipitation—about 13 inches
Air temperature—about 47 degrees F
Frost-free period—100 to 130 days

Characteristics of Tirod

Typical profile:
0 to 18 inches—grayish brown silt loam
18 to 30 inches—light brownish gray loam

30 to 40 inches—pale brown clay loam
40 to 62 inches—very pale brown loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight; by wind—moderate

Minor Components

- Bingham soils in level areas (5 percent)
- Parleys soils on convex terrace backslopes (5 percent)
- Soils that are on smooth slopes and are noncalcareous (5 percent)

Use and Management

Major uses: Irrigated cropland and hayland
Major management factor: Depth to carbonates and wind erosion

Irrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Minimize the risk of erosion by planting crops in narrow strips at right angles to the prevailing wind, subsoiling, and maintaining crop residue on the soil surface.

Irrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

130—Toefoot silt loam, 0 to 4 percent slopes

Composition

Toefoot and similar soils—90 percent
Minor components—10 percent

Setting

Landform: Stream terraces and toeslopes
Elevation: 5,000 to 5,400 feet
Climatic data (mean annual):
Precipitation—about 15 inches

Air temperature—about 43 degrees F
Frost-free season—80 to 100 days

Characteristics of Toefoot

Typical profile:
0 to 26 inches—dark grayish brown and grayish brown silt loam
26 to 33 inches—light brownish gray gravelly loam
33 to 40 inches—light brownish gray very gravelly sandy loam
40 to 62 inches—light brownish gray and pale brown silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 11.7 inches
Potential rooting depth: 60 inches or more
Runoff: Low
Hazard of erosion: By water—slight

Minor Components

- Small areas of soils that have a seasonal high water table at the surface to a depth of 18 inches in spring (5 percent)
- Soils that have an average of more than 18 percent clay in the subsoil (5 percent)

Use and Management

Major uses: Nonirrigated cropland, hayland, and pastureland
Major management factor: Growing season

Nonirrigated cropland
Suitable crops: Wheat and barley
General management consideration:
- The short growing season limits the choice of crops.

Nonirrigated hayland and pastureland
Suitable crops: Alfalfa hay and pasture
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay and forage, conservation practices such as managing nutrients and maintaining plant vigor are needed.
- Fencing, livestock watering facilities, and a planned grazing system are needed in areas used for pasture.

Interpretive Groups

Land capability classification: 3e, nonirrigated

131—Welby-Parleys complex, 0 to 2 percent slopes

Composition

Welby and similar soils—65 percent
Parleys and similar soils—20 percent
Minor components—15 percent

Setting

Landform: Lake terraces
Elevation: 4,400 to 5,200 feet

Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 48 degrees F
Frost-free period—100 to 130 days

Characteristics of Welby

Position on landscape: Convex or smooth slopes
Typical profile:
0 to 11 inches—brown silt loam
11 to 36 inches—very pale brown silt loam
36 to 60 inches—very pale brown fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 10.5 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight

Characteristics of Parleys

Position on landscape: Smooth or slightly concave slopes
Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 26 inches—grayish brown silty clay loam
26 to 64 inches—white and light gray silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: 12.8 inches
Potential rooting depth: 60 inches or more
Runoff: Negligible
Hazard of erosion: By water—none or slight

Minor Components

- Goosenawt soils on concave slopes (5 percent)
- Soils that are in relict stream channels and have rock fragments throughout the profile (5 percent)
- Tirod soils on smooth or concave slopes (5 percent)

Use and Management

Major uses: Irrigated and nonirrigated cropland and hayland
Major management factors: Permeability and depth to carbonates

Irrigated and nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The most suitable irrigation method is a sprinkler system.
- Adjust applications of irrigation water to the available water capacity and the water intake rate.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.

Irrigated and nonirrigated hayland
Suitable crop: Alfalfa hay
General management considerations:
- To maintain the quality of meadows and to produce good yields of hay, conservation practices such as using a sprinkler irrigation system that adequately controls irrigation water and minimizes water erosion, managing nutrients, and maintaining plant vigor are needed.

Interpretive Groups

Land capability classification: 2c, irrigated, and 3c, nonirrigated

132—Wursten gravelly silt loam, 4 to 15 percent slopes

Composition

Wursten and similar soils—85 percent
Minor components—15 percent

Setting

Landform: Fan remnants
Elevation: 5,300 to 5,700 feet
Climatic data (mean annual):
Precipitation—about 14 inches
Air temperature—about 44 degrees F
Frost-free season—75 to 100 days

Characteristics of Wursten

Typical profile:
0 to 16 inches—grayish brown gravelly silt loam
16 to 60 inches—very pale brown gravelly loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 8.5 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion: By water—moderate

Minor Components

- Cedarhill soils on south-facing slopes (2 percent)
- Hades soils on concave slopes (5 percent)
- Justesen soils on smooth slopes (3 percent)
- Ririe soils on smooth slopes (2 percent)
- Samaria soils on south-facing slopes (1 percent)
- Soils that have slopes of less than 4 percent or more than 15 percent (2 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, depth to carbonates, rock fragments on the surface, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley

General management considerations:
- The short growing season limits the choice of crops.
- Continuous erosion of the topsoil will expose layers that are high in content of carbonates.
- High concentrations of carbonates in the calcareous layer inhibit the uptake of certain nutrients and limit plant growth. Soil amendments are needed.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion by constructing terraces, chiseling stubble fields on the contour or across the slope in fall, and maintaining crop residue on the soil surface.

Rangeland
Dominant vegetation in natural potential plant community: Basin big sagebrush and bluebunch wheatgrass
General management consideration:
- The limitations for use as rangeland are minimal if proper grazing management is used.

Interpretive Groups

Land capability classification: 3e, nonirrigated
Ecological site: Loamy, 12- to 16-inch precipitation zone

133—Yago-Manila complex, 20 to 40 percent slopes

Composition

Yago and similar soils—40 percent
Manila and similar soils—35 percent
Minor components—25 percent

Setting

Landform: Fan remnants
Elevation: 4,900 to 6,500 feet
Climatic data (mean annual):
Precipitation—about 18 inches
Air temperature—about 43 degrees F
Frost-free period—70 to 90 days

Characteristics of Yago

Position on landscape: Convex slopes
Typical profile:
0 to 10 inches—dark brown very stony silty clay loam
10 to 40 inches—strong brown and reddish yellow very cobbly clay loam
40 to 60 inches—reddish yellow very cobbly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 7.8 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Characteristics of Manila

Position on landscape: Convex or slightly concave slopes

Typical profile:
0 to 5 inches—grayish brown silt loam
5 to 45 inches—brown and light brown silty clay loam and silty clay
45 to 60 inches—pink silt loam
Depth class: Very deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: 10.7 inches
Potential rooting depth: 60 inches or more
Runoff: Very high
Hazard of erosion: By water—severe

Minor Components

- Hades soils on ridges and concave slopes (15 percent)
- Lizdale soils on steep slopes (10 percent)

Use and Management

Major uses: Nonirrigated cropland, and rangeland
Major management factors: Growing season, permeability, rock fragments on the surface, water erosion, and slope

Nonirrigated cropland
Suitable crops: Wheat and barley
General management considerations:
- The short growing season limits the choice of crops.
- Rock fragments on the surface make seedbed preparation difficult.
- Minimize the risk of erosion and increase the water intake rate by chiseling stubble fields on the contour or across the slope in fall, maintaining crop residue on the soil surface, and limiting the number of tillage operations.

Rangeland
Dominant vegetation in natural potential plant community: Mountain big sagebrush and bluebunch wheatgrass
General management considerations:
- Seeding of adapted species to improve the range is limited by the rock fragments on the surface, water erosion, and slope.
- Use of equipment is limited by the rock fragments on the surface and slope.

Interpretive Groups

Land capability classification: 6e, nonirrigated
Ecological site: Yago—Stony Loam, 16- to 22-inch precipitation zone; Manila—Loamy, 16- to 22-inch precipitation zone

134—Water

This map unit consists of areas, such as lakes and ponds, that are covered with deep water for most of the year.

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. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, 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 woodland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational 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, or very firm 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, campgrounds, playgrounds, lawns, and trees and shrubs.

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. 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, somewhat limited,* and *very limited*. The suitability ratings are expressed 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. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

Travis James, area agronomist, and Dan Ogle, range conservationist, helped to prepare this section.

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

The survey area has about 264,000 acres of cropland, hayland, and pastureland. Of this, about 210,900 acres is nonirrigated cropland, 32,300 acres is irrigated cropland, and 20,900 acres is hayland and pastureland. About one-half of the farms and ranches are combined farming and livestock operations.

Field crops suited to the soils and climate in the nonirrigated areas include wheat and barley. A small amount of alfalfa is grown for hay, but it is limited by a shortage of available moisture in summer. The main crops produced in the irrigated areas are wheat, barley, and alfalfa. Small acreages of safflower and grass for seed are also grown.

Approximately 14,000 acres of the hayland and pastureland consists of wet and semiwet meadows. Most of this acreage is along the Big and Little Malad Rivers, Deep Creek, and Rock Creek. Representative soils in these areas are those of the Logan, Langless, and Brinnum series.

The cropping sequence used on the majority of the nonirrigated cropland is a summer fallow-wheat rotation. Also used is a 3-year rotation of winter wheat followed by spring wheat or barley and then summer fallow. Recently, annual cropping has become more popular, especially in the areas of higher precipitation.

Loss of the surface layer through sheet and rill erosion is a serious concern in areas of nonirrigated crops. As the surface layer is lost and part of the subsoil is incorporated into the plow layer, productivity is reduced. Concentrated flow erosion creates deep gullies in areas of moderate or steep slopes. These gullies are a considerable hazard to the operation of farm machinery. Soil eroded from cropland is deposited in streams, reducing the quality of water for municipal and recreational uses and for fish and wildlife and reducing the storage capacity of irrigation reservoirs.

Erosion control measures are designed to provide a protective cover for the soil surface, to reduce runoff, and to increase water infiltration. A cropping system that keeps plant cover on the soil surface reduces soil erosion losses to an amount that maintains the productive capacity of the soils. Including legumes in the crop rotation helps to control soil erosion and maintain soil fertility and tilth. Soils that have good tilth are granular and porous and have a high water infiltration rate. Minimum tillage and no-till practices help to reduce soil compaction and maintain soil tilth. Maintaining crop residue on a minimum of 30 percent of the soil surface per acre at the time of planting also increases infiltration and minimizes runoff and soil erosion.

Terraces and diversions reduce the length of slopes, which helps to minimize runoff and soil erosion. They are most suited to very deep, well drained soils that have uniform slopes of about 12 to 15 percent. Soils such as those of the Arbone, Broadhead, Manila, Rexburg, and Ririe series are suitable for terraces and diversions. Contour farming, cross-slope farming, and stripcropping can also be used to minimize soil erosion.

Information on the design of soil erosion control measures for each kind of soil is available at the local office of the Natural Resources Conservation Service.

Irrigation water is taken from local streams, reservoirs, and wells. The majority of the water available for irrigation is supplied by snowmelt. Irrigation methods used are surface and sprinkler irrigation systems. The meadows south of Malad City are irrigated partially by subsurface moisture. The area southwest of Malad City, known as Pocatello Valley, is a large closed basin, or playa, that is ponded during years of high precipitation.

The cropping sequence for irrigated farms generally consists of 2 or 3 years of small grain and 5 to 10 years of alfalfa. Shortages of irrigation water occur in 5 years out of 10. Applications of irrigation water should be adjusted to the available water capacity of the soil, the water intake rate, the soil depth, and the needs of the crop grown.

Most of the soils used for crops have a loam surface layer that is low in content of organic matter. Regular additions of crop residue and manure can help to maintain or increase organic matter content, improve soil structure and fertility, and increase the available water capacity and the water infiltration rate. Cultivated crops, hay, and pasture respond to applications of fertilizer. Wheat, barley, and grass for pasture and seed respond to applications of nitrogen, phosphorus, and sulfur. Legumes respond to applications of phosphorus and sulfur. A much higher rate of application of fertilizer is needed on irrigated soils than on nonirrigated soils. On all soils, the rate of application should be based on the results of soil tests, the needs of the crop grown, and the expected level of yields. On nonirrigated soils, the available moisture content should also be considered in determining the rate of application. A good fertilization program is essential for high production.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 5 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

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 landforming 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 woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by numerals 1 through 8. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are not likely to erode but have other limitations, impractical to remove, that limit their use.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation.

Class 7 soils have very severe limitations that make them unsuitable for cultivation.

Class 8 soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production.

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, woodland, wildlife habitat, or recreation.

The capability classification of map units in this survey area is given in the section “Detailed Soil Map Units” and in the yields table.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in this section. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units." The map units that meet the requirements for prime farmland are:

2	Arbone silt loam, 0 to 4 percent slopes
9	Bingham gravelly loam, 1 to 4 percent slopes (if irrigated)
10	Bingham-Tirod complex, 0 to 2 percent slopes
12	Bothwell silt loam, 0 to 2 percent slopes
15	Buckboard loam, 0 to 2 percent slopes
26	DeJarnet gravelly silt loam, 0 to 4 percent slopes (if irrigated)
30	Elevator silt loam, 0 to 4 percent slopes
31	Elevator-Jensen complex, 0 to 4 percent slopes
34	Goosenawt gravelly loam, 0 to 2 percent slopes
52	Jensen silt loam, 0 to 2 percent slopes
53	Jensen silt loam, 2 to 6 percent slopes
55	Jovine silt loam, 0 to 2 percent slopes
59	Kearns silt loam, 0 to 2 percent slopes
60	Kearns silt loam, 2 to 4 percent slopes
61	Kidman fine sandy loam, 1 to 4 percent slopes
67	Lanoak silt loam, 0 to 4 percent slopes
84	Parleys silt loam, 0 to 2 percent slopes
85	Parleys silt loam, 2 to 4 percent slopes
96	Rexburg silt loam, 1 to 4 percent slopes
119	Samaria silt loam, 0 to 4 percent slopes
127	Tickason very fine sandy loam, 0 to 2 percent slopes (if irrigated)
128	Tickason very fine sandy loam, 2 to 4 percent slopes (if irrigated)

129 Tirod silt loam, 0 to 2 percent slopes
130 Toefoot silt loam, 0 to 4 percent slopes

Rangeland

Dan Ogle, area range conservationist, helped to prepare this section.

Rangeland and grazing land are important to the economy of the survey area. Of the 679,000 acres in the area, approximately 51 percent is privately owned, 40 percent is administered by the Bureau of Land Management, 7 percent is administered by the Forest Service, and 2 percent is managed by the Idaho Department of Lands under a State of Idaho Endowment (school).

About 63 percent of the area is rangeland and 3 percent is irrigated hayland or pastureland, which is used primarily for the production of forage and browse for livestock and wildlife.

The remaining land is used as cropland and for roads, municipal purposes, and other such purposes. The crop aftermath in some areas of cropland is used as forage in fall. Nearly all of the land in the survey area is used by livestock or wildlife at some time during the year.

Cow-calf operations are the most common livestock enterprises. A few purebred beef cattle, sheep, pig, and cattle feedlot operations are also in the area. Ranch sizes vary, but they generally consist of 200 to 400 acres of private land with grazing privileges on Federal land.

The areas of rangeland below an elevation of 6,000 feet are used primarily in spring and fall, and those above an elevation of 6,000 feet are used primarily during the warmer summer months.

Proper management is needed to maintain or improve the basic soil and plant resources. Important range management practices include planned grazing systems (primarily rotations), proper grazing use, and proper season of use. Practices that help to accomplish these goals and help to achieve good distribution of grazing include properly locating salt and watering facilities and fencing. The suitability of range improvement practices such as brush management, range seeding, and water developments depends on specific characteristics of the soils. Information on these characteristics and the suitabilities of the soils can be found in the section "Detailed Soil Map Units."

In areas that have similar climate and topography, differences in the kind and amount of rangeland or forest understory vegetation are closely related to the kind of soil. Effective management is based on the relationship between the soils and vegetation and water.

Table 6 shows, for each soil that supports vegetation suitable for grazing, the ecological site; the total annual production of vegetation in favorable, normal, and unfavorable years; the characteristic vegetation; and the average percentage of each species. An explanation of the column headings in table 6 follows.

An *ecological site* is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of the site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

Total dry-weight production is the amount of vegetation that can be expected to grow annually in a well managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Characteristic vegetation—the grasses, forbs, and shrubs that make up most of the potential natural plant community on each soil—is listed by common name. Under *rangeland composition*, the expected percentage of the total annual production is given for each species making up the characteristic vegetation. The amount that can be used as forage depends on the kinds of grazing animals and on the grazing season.

Range management requires a knowledge of the kinds of soil and of the potential natural plant community. It also requires an evaluation of the present range similarity index and rangeland trend. Range similarity index is determined by comparing the present plant community with the potential natural plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential community, the higher the range similarity index. Rangeland trend is defined as the direction of change in an existing plant community relative to the potential natural plant community. Further information about the range similarity index and rangeland trend is available in chapter 4 of the "National Range and Pasture Handbook" (http://www.glti.nrcs.usda.gov/technical/publications/nrph.html).

The objective in range management is to control grazing so that the plants growing on a site are about the same in kind and amount as the potential natural plant community for that site. Such management generally results in the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion. Sometimes, however, an area with a range similarity index somewhat below the potential meets grazing needs, provides wildlife habitat, and protects soil and water resources.

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low- and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Table 7 shows the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates in the table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service or of the Cooperative Extension Service or from a commercial nursery.

Recreation

The soils of the survey area are rated in tables 8a and 8b according to limitations that affect their suitability for recreation. 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. *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 ratings in the tables indicate the severity of individual limitations. The ratings 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).

The ratings in the tables 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, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 8a and 8b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife

By Frank Fink, wildlife biologist, Natural Resources Conservation Service.

This section relates the general soil map units in this survey area to the expected occurrences of certain wildlife species. Wildlife populations in an area typically are related to the vegetation. The vegetation is closely related to the soil and its ability to produce herbaceous and woody plants.

The survey area supports a variety of resident game and nongame fish and wildlife including mammals, birds, reptiles, and amphibians. Migratory species of wildlife, most of which are avian species, also use the area.

Because the survey area has a variety of habitats, it supports a wide array of wildlife resources. Mountains, foothills, bottomland, and drainageways and their associated topography, soils, precipitation, and land uses provide diverse habitats that support a variety of wildlife.

The areas at the higher elevations support juniper, sagebrush, aspen, and smaller amounts of pine and fir. The shrubby vegetation in these mountainous areas includes serviceberry, snowberry, sagebrush, and bitterbrush.

Expanses of sagebrush, bitterbrush, rabbitbrush, and wheatgrasses are at the intermediate elevations. Springs and wet meadows are scattered throughout the survey area. Typically, they are along the old Lake Bonneville shoreline. Riparian areas occur as linear ribbons, frequently extending through two or more major soil groups. The vegetation associated with these areas includes willow, cottonwood, dogwood, alder, sedges, rushes, and other water-loving grasses.

The fish and wildlife populations in the survey area are largely determined by the suitability of the habitat, which includes the supply of food, the amount of cover, and the availability of water. Habitats differ in their capacity to provide these essential needs. Some of the deficiencies are a result of the characteristics of the soils and others are the result of management. Good management practices are needed to improve the habitat for wildlife as well as for the other uses of the soils.

Soils affect the kind and amount of vegetation available to wildlife as food and cover. They also affect the construction of water impoundments. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, and by promoting the natural establishment of desirable plants.

Big game

The big game species in the survey area include elk, mule deer, and antelope. The populations of elk are relatively small when compared to other areas in southeastern Idaho. Elk habitat is in the southeastern and extreme north-central parts of the survey area. These areas correlate with general soil map units 1, 2, and 4. They are mountainous, are gently sloping to very steep, and support juniper, sagebrush, some conifers, aspen in the draws, and range grasses.

Mule deer are throughout the survey area. Mule deer habitat in the area consists of isolated mountain ranges interspersed with agricultural land and rangeland in the valleys. Mule deer populations are dependent on available habitat in winter and summer. Aspen is a major component of mule deer habitat. Tall mountain brush communities consisting of juniper, sagebrush, bitterbrush, rabbitbrush, snowberry, and aspen provide habitat for mule deer in summer. These communities typically are associated with general soil map units 1, 2, 7, and 10.

Winter habitat for mule deer is a critical component for sustaining the populations in the area. Juniper is a common cover type in areas of winter range. Sagebrush and bitterbrush provide important forage in winter. Severe winter weather dramatically reduces the available habitat in winter. Depradation is common and mortality is high during severe winters. Mule deer winter at the lower elevations in general soil map units 1 and 2 during mild winters and in units 4 through 9 and unit 11 during harsher winters.

Antelope are in the nearly level to moderately steep areas, commonly in the southwestern part of the survey area. General soil map units 7, 9, and 13 are associated with these areas. The vegetation is characterized by nearly level grasslands to moderately steep areas that support dominantly juniper, sagebrush, and bunchgrasses.

Upland game

Common upland game birds in the area include pheasants, gray partridge, sharp-tailed grouse, sage grouse, ruffed grouse, blue grouse, and mourning dove.

The birds associated with the agricultural areas are pheasants and gray partridge and to a lesser extent sharp-tailed grouse. Pheasants and gray partridge are associated with general soil map units 5, 6, and 7. These areas typically are farmed; therefore, they provide limited habitat for these species. Winter habitat for these birds is associated with the riparian areas in general soil map unit 6. The limited quality of the nesting and winter habitat restricts the populations of pheasants and gray partridge.

One of the largest concentrations of sharp-tailed grouse in southeastern Idaho is in the survey area. Sharp-tailed grouse typically are associated with general soil map units 6 through 9 and unit 13. These grouse use the areas of grassland with some brushy cover (sagebrush, bitterbrush, and serviceberry) in summer. They feed on seeds and cultivated grain late in summer and in fall. Brush species provide food in fall and winter, and they are an extremely important component of the habitat for sharp-tailed grouse.

Sage grouse use areas similar to those used by sharp-tailed grouse, but sage grouse are more dependent on the sagebrush in the plant community. Sage grouse can be found in general soil map units 6 through 9 and unit 13.

Ruffed grouse and blue grouse inhabit the timbered mountainous areas. These species generally are associated with general soil map units 1 through 4, but at certain times of the year they are also associated with the areas at the higher elevations in general soil map units 7 and 8. Ruffed grouse commonly are associated with the riparian areas that support stands of dominantly aspen. Blue grouse typically are associated with stands of fir and pine at the higher elevations.

Furbearers

Furbearers, such as otter, beaver, mink, raccoon, and muskrat, live in and around the creeks and streams in the survey area. The major riparian areas are in general soil map units 6, 12, and 13. Small creeks throughout the survey area extend into the foothills and mountains and provide additional riparian areas for these furbearers. Coyote, red fox, and skunk are throughout the area, in all of the general soil map units.

Waterfowl

Waterfowl are concentrated along streams, rivers, and reservoirs in the survey area. Typical avian species associated with the lakes, streams, and wetlands include geese, mallards, teal, sandhill crane, and long-billed curlew. The main concentrations of waterfowl are associated with general soil map units 6, 12, and 13. The lower Malad River, south of Malad, provides habitat for the highest concentration of waterfowl in the area. Insufficient undisturbed nesting cover and inadequate brood-rearing cover limit waterfowl populations in the survey area.

Raptors

Raptors are throughout the area, in all of the general soil map units. Golden eagle, bald eagle, red-tailed hawk, marsh hawk, rough-legged hawk, ferruginous hawk, American kestrel, and at times, peregrine falcon have been known to inhabit the survey area.

Threatened and endangered species

Two threatened or endangered wildlife species are known to migrate through the survey area. Bald eagle and peregrine falcon have been sighted in the area but are not known to use the area for nesting. Bald eagle feed in areas associated with lakes, rivers, and reservoirs, and they are associated with general soil map units 6, 12, and 13, near the major streams and wetlands. During migration, though, they may be found in areas away from wetlands feeding on winterkill carcasses, jackrabbits, and ground squirrels. Peregrine falcon are associated with areas of open rangeland and bottomland. All of the general soil map units, except those in the mountainous areas, provide suitable habitat for peregrine falcon.

The Idaho Department of Fish and Game, Idaho Conservation Data Center, has identified one plant in the area as being of special concern. Western waterleaf (*Hydrophyllum occidentale*) is a rare plant in the area. It typically is in moist open areas of Douglas fir forests.

Fisheries

Fisheries in the survey area are limited to stream and reservoir habitat. Several reservoirs provide fishing opportunities for local residents. Daniels, St. Johns, Pleasant View, Deep Creek, Weston, and Devils Creek Reservoirs are the most important fisheries in the area. The Idaho Department of Fish and Game have stocked these reservoirs with rainbow trout, cutthroat trout, largemouth bass, tiger muskie, and panfish.

The stream fisheries are limited because of poor habitat. Excessive sediment deposited in the creeks as a result of poor watershed management has lowered the fish populations in the survey area. Resident game fish in the streams and creeks are rainbow trout and cutthroat trout.

Engineering

This section provides information for planning land uses related to urban development and to 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 estimated data and test data in the "Soil Properties" section.

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 within a depth of 5 or 6 feet. 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 grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 or 6 feet of the surface, soil wetness, depth to a seasonal high water table, 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 9a and 9b show the degree and kind of soil limitations that affect 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. *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 ratings in the tables indicate the severity of individual limitations. The ratings 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).

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 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. 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, 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 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, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet 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 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.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 10a and 10b show 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. *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 ratings in the tables indicate the severity of individual limitations. The ratings 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).

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 24 and 60 inches 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 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 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 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 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, 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.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

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 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 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.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 11a and 11b give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* 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 table 11a, only the likelihood 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 bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of gravel and sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel or sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair,* or *poor* as potential sources of topsoil, reclamation material, 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, reclamation material, or roadfill. The lower the number, the greater the limitation.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches 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. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. 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.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

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 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. 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 that affect 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. The ease of excavation is affected by large stones, depth to a water table, and slope. 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 (shrink-swell potential).

Water Management

Table 12 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. 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. *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 ratings in the table indicate the severity of individual limitations. The ratings 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).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

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 13 gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under the heading “Soil Series and Their Morphology.”

Texture is given in the standard terms used by the U.S. Department of Agriculture. 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. If the content of particles coarser than sand is as much as about 15 percent, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 1998) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 1998).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches 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, CL-ML.

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 in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-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.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches 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 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.

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.

The estimates of grain-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 omitted in the table.

Physical Properties

Table 14 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.

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. 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.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 14, 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 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 shrink-swell 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.

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. In table 14, 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 in table 14 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. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be 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 15 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.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

Table 16 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.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff is water that flows off the surface of the land without sinking into the soil. Runoff classes are estimated by considering the slope and the permeability (K_{sat}) of the upper 1 meter of soil material and taking into account bedrock or cemented layers.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 16 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.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 16 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 but is less than 50 percent in all months 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 17 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 impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer, which significantly affects 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.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (USDA, 1975). 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 18 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Eleven 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 Mollisol.

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 Xeroll (*Xer*, meaning dry, plus *oll*, from Mollisol).

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 Haploxerolls (*Hapl*, meaning minimum horizon development, plus *xeroll*, the suborder of the Mollisols that has a xeric moisture regime or an aridic moisture regime that borders on xeric).

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 *Calcic* identifies the intergrade subgroup that has a calcic horizon or identifiable secondary carbonates at critical depths in the soil profile. An example is Calcic Haploxerolls.

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 coarse-silty, mixed, frigid Calcic Haploxerolls.

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 of a soil with the taxonomic classification given above is the Rexburg series.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (USDA, 1993). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (USDA, 1975) and in “Keys to Soil Taxonomy” (USDA, 1994). Unless otherwise indicated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units of each soil series are described in the section “Detailed Soil Map Units.”

Araveton Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and lava plains
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 40 percent
Elevation: 4,900 to 6,200 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-loamy, mixed, frigid Calcic Haploxerolls

Typical Pedon

Araveton silt loam in an area of Hutchley-McCarey-Araveton complex, 4 to 40 percent slopes; about 6 miles west and 1 mile south of Holbrook, in Oneida County, Idaho; about 900 feet north and 200 feet east of the southwest corner of sec. 6, T. 15 S., R. 32 E.

A—0 to 8 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak thick and medium platy structure parting to weak very thin platy; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular pores and many very fine irregular pores; 5 percent gravel; slightly alkaline (pH 7.5); clear wavy boundary.

Bw1—8 to 17 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine and fine tubular pores and common very fine irregular pores; 5 percent gravel; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bw2—17 to 27 inches; brown (10YR 5/3) silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; common very fine and fine tubular pores; 5 percent gravel; slightly alkaline (pH 7.7); clear wavy boundary.

Bk1—27 to 36 inches; brown (10YR 5/3) silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine tubular pores; 10 percent gravel and 3 percent cobbles; slightly effervescent; 15 percent carbonate threads; slightly alkaline (pH 7.8); abrupt wavy boundary.

Bk2—36 to 51 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 5/3) moist; moderate fine, medium, and coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; 15 percent gravel and 5 percent cobbles; strongly effervescent; 15 percent carbonate threads; moderately alkaline (pH 8.3); abrupt wavy boundary.

Bk3—51 to 62 inches; very pale brown (10YR 8/2) gravelly loam, very pale brown (10YR 7/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine irregular pores; 20 percent gravel and 10 percent cobbles; violently effervescent; 90 percent carbonate coatings on rock fragments; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 17 inches
Depth to secondary carbonates—20 to 30 inches

Particle-size control section (average):
Clay content—18 to 26 percent
Rock fragment content—5 to 30 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or loam

Bk horizon:
Value—5 to 8 dry, 4 to 7 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or gravelly loam
Calcium carbonate equivalent—10 to 35 percent

Arbone Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 30 percent
Elevation: 5,000 to 5,700 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 75 to 100 days

Taxonomic class: Coarse-loamy, mixed, frigid Calcic Haploxerolls

Typical Pedon

Arbone silt loam in an area of Arbone-Hondoho-Cedarhill complex, 12 to 30 percent slopes; near Roy Summit, in Oneida County, Idaho; about 2,500 feet south and 500 feet west of the northeast corner of sec. 3, T. 13 S., R. 31 E.

A—0 to 10 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine tubular pores; slightly alkaline (pH 7.6); clear wavy boundary.

Bw—10 to 15 inches; grayish brown (10YR 5/2) silt loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine and fine tubular pores; slightly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—15 to 26 inches; brown (10YR 5/3) gravelly silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; common very fine tubular pores; 15 percent gravel; strongly effervescent; moderately alkaline (pH 8.0); gradual wavy boundary.

Bk2—26 to 31 inches; brown (10YR 5/3) gravelly silt loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; common fine tubular pores; 15 percent gravel; strongly effervescent; slightly alkaline (pH 7.8); gradual wavy boundary.

Bk3—31 to 49 inches; light brownish gray (10YR 6/2) gravelly silt loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; few very fine tubular pores; 40 percent medium carbonate masses; 20 percent gravel; violently effervescent; moderately alkaline (pH 8.0); gradual wavy boundary.

C—49 to 60 inches; very pale brown (10YR 7/3) gravelly silt loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 20 percent gravel; strongly effervescent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 18 inches
Depth to secondary carbonates—12 to 25 inches

Particle-size control section (average):
Clay content—13 to 18 percent
Rock fragment content—5 to 35 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—5 to 8 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Texture—gravelly silt loam or gravelly loam
Calcium carbonate equivalent—5 to 30 percent

C horizon:
Value—5 to 8 dry, 4 to 6 moist
Chroma—3 or 4 dry or moist
Texture—gravelly silt loam or gravelly loam

Bayhook Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 4 percent
Elevation: 4,400 to 4,700 feet
Mean annual precipitation: 8 to 11 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Coarse-silty, mixed, mesic Sodic Xeric Haplocalcids

Typical Pedon

Bayhook silt loam, 0 to 2 percent slopes; about 2 miles south and 3 miles east of Black Pine, in Oneida County, Idaho; about 800 feet south and 300 feet east of the northwest corner of sec. 10, T. 16 S., R. 30 E.

A1—0 to 3 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate very thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; few very fine tubular pores and many very fine and few fine vesicular pores; slightly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2—3 to 7 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine to coarse roots; common very fine and few fine tubular pores and common very fine vesicular pores; slightly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bk1—7 to 13 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and few fine and coarse roots; common very fine tubular pores; 35 percent cicada krotovinas; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2—13 to 25 inches; light gray (2.5Y 7/2) silt loam, light brownish gray (2.5Y 6/2) moist; massive; very hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; violently effervescent; strongly alkaline (pH 8.5); discontinuous weakly cemented laminar zones; 35 percent cicada krotovinas; abrupt wavy boundary.

Bk3—25 to 33 inches; pale yellow (2.5Y 8/2) silt loam, light brownish gray (2.5Y 6/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 35 percent cicada krotovinas; violently effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

Bk4—33 to 60 inches; pale yellow (2.5Y 8/2) silt loam, light brownish gray (2.5Y 6/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 10 percent cicada krotovinas; 2 percent rounded gravel; violently effervescent; strongly alkaline (pH 8.8).

Range in Characteristics

Profile:
Depth to calcic horizon—6 to 18 inches

Particle-size control section (average):
Clay content—6 to 17 percent

A horizon:
Value—3 or 4 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR to 5Y
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Content of cicada krotovinas—10 to 50 percent
Calcium carbonate equivalent—5 to 30 percent
Sodium adsorption ratio—13 to 30 to a depth of 40 inches

Bingham Taxadjunct

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate in the upper part and rapid in the lower part
Landform: Lake terraces
Parent material: Kind—alluvium over lacustrine deposits; source—quartzite and limestone
Slope range: 0 to 4 percent
Elevation: 4,500 to 4,900 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-loamy, mixed, mesic Calcic Pachic Argixerolls

Typical Pedon

Bingham gravelly loam in an area of Bingham-Tirod complex, 0 to 2 percent slopes; about 2 miles north of Malad City, in Oneida County, Idaho; about 1,220 feet south and 1,320 feet east of the northwest corner of sec. 10, T. 14 S., R. 36 E.

Ap—0 to 6 inches; grayish brown (10YR 5/2) gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure parting to moderate fine and medium granular; soft, very friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; 20 percent gravel; neutral (pH 7.2); abrupt smooth boundary.

Bt1—6 to 11 inches; grayish brown (10YR 5/2) gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine and few fine and medium roots; 40 percent faint clay films on faces of peds and lining pores; 15 percent gravel; neutral (pH 7.2); abrupt wavy boundary.

Bt2—11 to 27 inches; yellowish brown (10YR 5/4) gravelly loam, dark brown (10YR 3/3) moist; weak medium prismatic structure parting to moderate medium and coarse subangular blocky; hard, firm, moderately sticky and moderately plastic; common very fine and few fine and medium roots; 70 percent distinct clay films on faces of peds and lining pores; 20 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.6); clear wavy boundary.

2Bt3—27 to 38 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; 30 percent gravel and 10 percent cobbles; slightly alkaline (pH 7.8); abrupt smooth boundary.

2Bk—38 to 45 inches; very pale brown (10YR 8/2) very gravelly loamy sand, pale brown (10YR 6/3) moist; massive; slightly hard, friable, nonsticky and slightly plastic; common very fine roots; cemented carbonate coatings on all sides of rock fragments; 40 percent gravel and 10 percent cobbles; violently effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

2Ck1—45 to 56 inches; very gravelly loamy coarse sand, brown (10YR 5/3) moist; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; 40 percent gravel and 5 percent cobbles; slightly effervescent; slightly alkaline (pH 7.8); carbonate coatings on rock fragments; clear wavy boundary.

2Ck2—56 to 65 inches; variegated very gravelly loamy coarse sand, brown (10YR 5/3) moist; single grain; loose, nonsticky and nonplastic; 30 percent gravel and 25 percent cobbles; strongly effervescent; moderately alkaline (pH 8.0); carbonate coatings on rock fragments.

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 18 inches
Depth to secondary carbonates—18 to 40 inches

Particle-size control section (average):
Clay content—18 to 25 percent
Rock fragment content—15 to 30 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Hue—10YR or 7.5YR
Value—3 to 5 dry, 2 to 4 moist

2Bt and 2Bk horizons:
Value—7 or 8 dry and 5 or 6 moist, or variegated
Chroma—2 or 3 dry or moist
Texture—very gravelly sandy loam or very gravelly loamy sand
Calcium carbonate equivalent—15 to 35 percent

2Ck horizon:
Texture—very gravelly loamy coarse sand or extremely gravelly loamy sand
Rock fragment content—45 to 75 percent

Taxadjunct Features

The Bingham soils in this survey area do not have a strongly contrasting particle-size class because the transition between the particle-size classes is too thick. Also, the mollic epipedon extends to a depth of 27 inches, which is thicker than is allowed by the official series. These differences, however, do not affect the use and management of the soils.

Bloor Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Moderately well drained
Permeability: Slow
Landform: Lake plains and flood plains
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,500 feet

Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-silty, mixed, mesic Durinodic Xeric Natrargids

Typical Pedon

Bloor silt loam in an area of Bloor-Brinnum complex, 0 to 2 percent slopes; about 6 miles south of Malad City, in Oneida County, Idaho; about 1,350 feet east and 1,160 feet north of the southwest corner of sec. 28, T. 15 S., R. 36 E.

A—0 to 6 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate thick platy structure parting to moderate medium granular; slightly hard, very friable, nonsticky and nonplastic; many coarse and medium and common very fine and fine roots; few medium and common very fine and fine tubular pores; moderately alkaline (pH 8.2); clear wavy boundary.

E—6 to 12 inches; light gray (10YR 7/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate fine subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many coarse and medium, common very fine, and few fine roots; few medium and many very fine tubular pores; moderately alkaline (pH 8.4); abrupt smooth boundary.

Btn—12 to 20 inches; brown (10YR 4/3) silt loam, dark brown (10YR 3/3) moist; weak coarse prismatic structure parting to strong fine subangular blocky; hard, friable, slightly sticky and slightly plastic; common fine and many very fine roots; common very fine and fine tubular pores; 70 percent clay films on faces of peds and lining pores; very strongly alkaline (pH 9.4); abrupt wavy boundary.

Bkq—20 to 29 inches; very pale brown (10YR 8/2) silt loam, light yellowish brown (10YR 6/4) moist; weak thick platy structure; extremely hard, very firm and brittle, nonsticky and nonplastic; few very fine and fine roots; few medium and many very fine and fine tubular pores; discontinuous weakly cemented matrix; violently effervescent; very strongly alkaline (pH 9.6); clear wavy boundary.

C1—29 to 39 inches; pale yellow (2.5Y 8/2) very fine sandy loam, light yellowish brown (2.5Y 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; many very fine and fine tubular pores; common faint yellowish brown (10YR 5/6) masses of iron accumulation; strongly effervescent; very strongly alkaline (pH 9.4); clear wavy boundary.

C2—39 to 47 inches; light gray (2.5Y 7/2) fine sandy loam, grayish brown (2.5Y 5/2) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine tubular pores; common distinct yellowish brown (10YR 5/6) masses of iron accumulation; slightly effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

2C3—47 to 60 inches; pale yellow (2.5Y 8/2) silt loam, light gray (2.5Y 7/2) moist; massive; hard, firm, slightly sticky and slightly plastic; many distinct yellowish brown (10YR 5/6) masses of iron accumulation; strongly effervescent; very strongly alkaline (pH 9.4).

Range in Characteristics

Profile:
Depth to natric horizon—2 to 15 inches
Depth to discontinuous silica cementation or brittle matrix—15 to 25 inches
Depth to seasonal high water table—60 to 72 inches in January through May

Particle-size control section (average):
Clay content—22 to 27 percent

A horizon:
Value—5 to 7 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

E horizon:
Value—6 or 7 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Btn horizon:
Value—4 to 7 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—silt loam, silty clay loam, or clay loam
Sodium adsorption ratio—13 to 30

Bkq horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—1 to 10 percent

C horizon:
Hue—10YR or 2.5Y
Value—7 or 8 dry, 5 or 6 moist
Chroma—2 to 4 dry or moist
Texture—stratified sandy loam to silty clay loam

2C horizon:
Hue—10YR or 2.5Y
Value—7 or 8 dry, 6 or 7 moist
Chroma—2 or 3 dry or moist

Other Features

The Bloor soils in this survey area have less than 27 percent clay in the particle-size control section and they do not have an accumulation of gypsum. These differences, however, do not affect the use and management of the soils.

Bothwell Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Fan remnants and lake terraces
Parent material: Kind—alluvium, lacustrine deposits, and loess; source—mixed
Slope range: 0 to 25 percent
Elevation: 4,900 to 5,900 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-silty, mixed, frigid Pachic Argixerolls

Typical Pedon

Bothwell silt loam, 0 to 2 percent slopes; about 16 miles southwest of Malad City, in Oneida County, Idaho; about 2,750 feet east and 100 feet north of the southwest corner of sec. 23, T. 16 S., R. 34 E.

Ap—0 to 9 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate very fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; few very fine tubular pores; slightly alkaline (pH 7.8); abrupt smooth boundary.

Bt1—9 to 20 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; many very fine roots; many very fine pores; 15 percent faint clay films on faces of peds and lining pores; slightly alkaline (pH 7.6); gradual smooth boundary.

Bt2—20 to 26 inches; brown (10YR 5/3) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate very fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; many very fine roots; many very fine and fine irregular pores and few very fine tubular pores; 40 percent distinct clay films on faces of peds and lining pores; slightly alkaline (pH 7.6); gradual smooth boundary.

Bt3—26 to 45 inches; brown (10YR 5/3) silty clay loam, dark brown (7.5YR 3/2) moist; moderate very fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine tubular pores; 70 percent faint clay films on faces of peds and lining pores; slightly alkaline (pH 7.8); gradual smooth boundary.

Bk—45 to 60 inches; pale brown (10YR 6/3) silt loam, brown (7.5YR 4/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 50 inches
Depth to secondary carbonates—44 inches or more

Particle-size control section (average):
Clay content—22 to 27 percent in the upper part and 28 to 34 percent in the lower part
Rock fragment content—0 to 3 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 4 dry, 1 to 3 moist

Bt horizon:
Value—5 to 7 dry, 2 to 4 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or silty clay loam

Bk horizon:
Value—5 to 7 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silty clay loam
Calcium carbonate equivalent—5 to 15 percent

Brinnum Taxadjunct

Depth class: Very deep (greater than 60 inches)
Drainage class: Very poorly drained
Permeability: Moderately slow
Landform: Lake plains, lake terraces, and flood plains
Parent material: Kind—alluvium influenced by loess; source—mixed

Slope range: 0 to 2 percent
Elevation: 4,300 to 4,500 feet
Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-silty, mixed (calcareous), mesic Aeric Endoaquents

Typical Pedon

Brinnum silt loam in an area of Bloor-Brinnum complex, 0 to 2 percent slopes; about 4 miles south of Malad City, in Oneida County, Idaho; about 360 feet west and 1,400 feet south of the northeast corner of sec. 29, T. 15 S., R. 36 E.; colors in this pedon description are for moist soil unless otherwise noted.

A1—0 to 4 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; weak medium and coarse granular structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; many very fine, fine, and medium tubular pores; strongly effervescent; very strongly alkaline (pH 9.6); clear smooth boundary.

A2—4 to 9 inches; very dark grayish brown (10YR 3/2) silt loam, light brownish gray (10YR 6/2) dry; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine, fine, and medium roots; many very fine and fine and few medium tubular pores; strongly effervescent; very strongly alkaline (pH 9.6); clear wavy boundary.

Cg1—9 to 21 inches; light brownish gray (10YR 6/2) silt loam, very pale brown (10YR 8/2) dry; massive; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine and medium tubular pores; violently effervescent; very strongly alkaline (pH 9.6); clear wavy boundary.

Cg2—21 to 31 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine and medium tubular pores; slightly effervescent; very strongly alkaline (pH 9.4); clear wavy boundary.

Cg3—31 to 46 inches; light brownish gray (2.5Y 6/2) silty clay loam, pale yellow (2.5Y 8/2) dry; massive; hard, friable, moderately sticky and slightly plastic; few very fine and fine roots; common fine and few medium tubular pores; 15 percent distinct light olive brown (2.5Y 5/4) masses of iron accumulation; strongly effervescent; very strongly alkaline (pH 9.2); gradual wavy boundary.

Cg4—46 to 60 inches; light gray (2.5Y 7/2) silty clay loam, pale yellow (2.5Y 8/2) dry; massive; hard, firm, moderately sticky and moderately plastic; few very fine roots; few medium tubular pores; violently effervescent; 80 percent strongly cemented calcium carbonate nodules; strongly alkaline (pH 9.0).

Range in Characteristics

Profile:
Depth to seasonal high water table—6 to 18 inches in September through May

Particle-size control section (average):
Clay content—18 to 27 percent

A horizon:
Value—6 to 8 dry, 3 to 7 moist
Chroma—2 or 3 dry or moist
Sodium adsorption ratio—5 to 15

Cg horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 7 moist

Chroma—2 or 3 dry or moist
Texture—silt loam or silty clay loam
Sodium adsorption ratio—40 to 100

Taxadjunct Features

The Brinnum soils in this survey area have a higher sodium adsorption ratio than is allowed by the official series and the ratio does not decrease significantly with depth. Also, the soils do not have a cambic horizon. These differences, however, do not affect the use and management of the soils.

Broadhead Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Slow
Landform: Plains and fan remnants
Parent material: Kind—alluvium; source—igneous rock, sandstone, and quartzite
Slope range: 4 to 30 percent
Elevation: 5,000 to 5,900 feet
Mean annual precipitation: 17 to 20 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 100 days

Taxonomic class: Fine, montmorillonitic, frigid Pachic Argixerolls

Typical Pedon

Broadhead silt loam in an area of Manila-Broadhead complex, 4 to 12 percent slopes; about 5 miles north of Malad City, in Oneida County, Idaho; about 850 feet north and 125 feet west of the southeast corner of sec. 28, T. 13 S., R. 36 E.

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine and few fine roots; many fine and very fine tubular and irregular pores; neutral (pH 7.0); clear smooth boundary.

AB—9 to 15 inches; dark grayish brown (10YR 4/2) silty clay loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure parting to moderate medium granular; hard, friable, moderately sticky and moderately plastic; common very fine roots; common fine and very fine tubular pores; neutral (pH 6.8); clear wavy boundary.

Bt1—15 to 23 inches; brown (10YR 5/3) silty clay, dark brown (10YR 3/3) moist; strong fine subangular blocky structure; very hard, firm, very sticky and very plastic; few very fine roots; common fine and very fine tubular pores; 40 percent faint and few distinct clay films on faces of peds and 15 percent faint clay films lining pores; neutral (pH 6.8); clear wavy boundary.

Bt2—23 to 36 inches; yellowish brown (10YR 5/4) silty clay, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; very hard, firm, very sticky and very plastic; few very fine roots; common very fine tubular pores; 70 percent distinct clay films on faces of peds and 40 percent faint clay films lining pores; 5 percent gravel and 3 percent cobbles; slightly alkaline (pH 7.4); gradual wavy boundary.

BC—36 to 41 inches; yellowish brown (10YR 5/4) gravelly silty clay, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; very hard, firm, very sticky and very plastic; 15 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.6); gradual wavy boundary.

C—41 to 60 inches; very pale brown (10YR 7/3) gravelly clay loam, light gray (10YR

7/2) moist; massive; slightly hard, friable, moderately sticky and moderately plastic; 20 percent gravel and 10 percent cobbles; strongly effervescent; neutral (pH 7.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 34 inches
Depth to calcareous material—40 inches or more

Particle-size control section (average):
Clay content—35 to 50 percent
Rock fragment content—0 to 10 percent

Ap and AB horizons:
Hue—7.5YR to 10YR
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Hue—7.5YR or 10YR
Value—4 to 6 dry, 2 to 4 moist
Chroma—2 to 4 dry or moist
Texture—silty clay loam or silty clay

BC horizon:
Hue—7.5YR or 10YR
Value—5 or 6 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist
Texture—gravelly silty clay or silty clay
Rock fragment content—0 to 25 percent

C horizon:
Value—6 or 7 dry, 4 to 7 moist
Chroma—2 or 3 dry or moist
Texture—gravelly clay loam or clay loam
Rock fragment content—0 to 25 percent

Buckboard Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,900 to 5,200 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-loamy, mixed, frigid Pachic Haploxerolls

Typical Pedon

Buckboard loam, 0 to 2 percent slopes; about 15 miles southwest of Malad City, in Oneida County, Idaho; about 2,000 feet west and 2,700 feet north of the southeast corner of sec. 35, T. 15 S., R. 34 E.

Ap—0 to 9 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR

3/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine tubular pores; 2 percent gravel; slightly alkaline (pH 7.6); clear smooth boundary.

A—9 to 15 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; soft, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine tubular pores; 1 percent gravel; slightly alkaline (pH 7.6); clear smooth boundary.

Bw1—15 to 23 inches; brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; moderate fine prismatic structure parting to moderate medium subangular blocky; hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular pores; 10 percent hard nodules; 1 percent gravel; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bw2—23 to 43 inches; light brownish gray (10YR 6/2) loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; very hard, very firm, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; 10 percent hard nodules; moderately alkaline (pH 8.0); clear wavy boundary.

Bw3—43 to 50 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine irregular pores; moderately alkaline (pH 8.0); clear wavy boundary.

Bk1—50 to 59 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; moderate fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine irregular pores; strongly effervescent; few fine threads of secondary carbonates; moderately alkaline (pH 8.0); abrupt smooth boundary.

Bk2—59 to 65 inches; light gray (10YR 7/2) loam, pale brown (10YR 6/3) moist; weak fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; 15 percent prominent brown (7.5YR 4/4) masses of iron accumulation; violently effervescent; many medium masses of secondary carbonates; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 30 inches
Depth to secondary carbonates—44 to 55 inches

Particle-size control section (average):
Clay content—18 to 27 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—loam or silt loam

Bk horizon:
Value—6 or 7 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist
Texture—loam or silt loam
Calcium carbonate equivalent—5 to 10 percent

Buist Series

Depth class: Very deep (greater than 60 inches)

Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants, hills, and mountains
Parent material: Kind—alluvium influenced by loess; source—mixed
Slope range: 4 to 30 percent
Elevation: 5,000 to 6,000 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 85 to 95 days

Taxonomic class: Loamy-skeletal, mixed, frigid Calcic Haploxerolls

Typical Pedon

Buist gravelly silt loam in an area of Ririe-Buist complex, 4 to 12 percent slopes; about 8 miles north of Holbrook, in Oneida County, Idaho; about 2,100 feet south and 1,500 feet west of the northeast corner of sec. 31, T. 13 S., R. 33 E.

Ap—0 to 7 inches; brown (10YR 5/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine tubular pores; 15 percent gravel and 1 percent stones; slightly alkaline (pH 7.6); clear wavy boundary.

BA—7 to 15 inches; brown (10YR 5/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine tubular pores; 20 percent gravel and 5 percent cobbles; slightly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—15 to 28 inches; very pale brown (10YR 7/3) very gravelly loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine tubular pores; 45 percent gravel; strongly effervescent; 40 percent irregular carbonate threads and masses throughout; moderately alkaline (pH 8.0); abrupt wavy boundary.

Bk2—28 to 43 inches; very pale brown (10YR 7/4) extremely gravelly fine sandy loam, light yellowish brown (10YR 6/4) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; few very fine tubular pores; 55 percent gravel and 10 percent cobbles; violently effervescent; 70 percent irregular carbonate threads and masses; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bk3—43 to 60 inches; very pale brown (10YR 7/4) extremely gravelly fine sandy loam, dark yellowish brown (10YR 4/4) moist; single grain; loose, nonsticky and nonplastic; 60 percent gravel and 15 percent cobbles; violently effervescent; 70 percent irregular carbonate threads and masses; moderately alkaline (pH 8.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 19 inches
Depth to secondary carbonates—8 to 19 inches

Particle-size control section (average):
Clay content—10 to 18 percent
Rock fragment content—35 to 70 percent

Ap horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

BA horizon:
Value—5 or 6 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—3 or 4 dry or moist
Texture—very gravelly loam or extremely gravelly fine sandy loam
Calcium carbonate equivalent—15 to 40 percent

Calpac Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains and ridges
Parent material: Kind—colluvium and alluvium; source—sedimentary rock
Slope range: 30 to 70 percent
Elevation: 5,200 to 7,200 feet
Mean annual precipitation: 20 to 23 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, mixed, frigid Calcic Pachic Haploxerolls

Typical Pedon

Calpac gravelly silt loam in an area of Ireland-Calpac association, 30 to 60 percent slopes; about 11 miles west of Malad City, in Oneida County, Idaho; about 600 feet west and 800 feet north of the southeast corner of sec. 15, T. 14 S., R. 34 E.

A—0 to 8 inches; dark brown (10YR 3/3) gravelly silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular pores; 15 percent gravel and 5 percent cobbles; neutral (pH 7.1); clear wavy boundary.
AB—8 to 15 inches; dark brown (10YR 3/3) very gravelly silt loam, very dark brown (10YR 2/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and vesicular pores; 20 percent gravel and 15 percent cobbles; neutral (pH 7.2); gradual wavy boundary.
Bw—15 to 23 inches; brown (10YR 4/3) extremely cobbly silt loam, dark brown (7.5YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and vesicular pores; 30 percent gravel and 35 percent cobbles; slightly alkaline (pH 7.4); clear wavy boundary.
Bk1—23 to 31 inches; brown (10YR 4/3) extremely cobbly silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 25 percent gravel and 45 percent cobbles; slightly effervescent; few fine masses of carbonate and common coatings of carbonate on underside of rock fragments; slightly alkaline (pH 7.7); clear wavy boundary.
Bk2—31 to 60 inches; brown (10YR 4/3) extremely cobbly silt loam, dark yellowish

brown (10YR 3/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 25 percent gravel and 50 percent cobbles; strongly effervescent; many coatings of carbonate on underside of rock fragments; moderately alkaline (pH 8.1).

Range in Characteristics

Profile:
Thickness of mollic epipedon—21 to 33 inches
Depth to secondary carbonates—23 to 40 inches

Particle-size control section (average):
Clay content—18 to 25 percent
Rock fragment content—35 to 70 percent

A and AB horizons:
Value—3 or 4 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Hue—7.5YR or 10YR
Value—3 or 4 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist
Texture—extremely cobbly silt loam or extremely cobbly loam
Calcium carbonate equivalent—5 to 14 percent

Cedarhill Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and mountains
Parent material: Kind—alluvium and colluvium; source—limestone, quartzite, and sandstone
Slope range: 4 to 55 percent
Elevation: 5,000 to 6,500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 90 to 100 days

Taxonomic class: Loamy-skeletal, mixed, frigid Typic Calcixerolls

Typical Pedon

Cedarhill gravelly silt loam in an area of Ririe-Cedarhill complex, 4 to 12 percent slopes; about 11 miles north and 18 miles west of Malad City, in Oneida County, Idaho; about 2,500 feet east and 1,600 feet north of the southwest corner of sec. 29, T. 12 S., R. 33 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine and medium roots; common fine and medium tubular pores; 10 percent fine gravel and 5 percent cobbles; strongly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—7 to 12 inches; grayish brown (10YR 5/2) gravelly loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine roots; common very fine and fine tubular pores; 10 percent gravel and 5 percent cobbles; strongly effervescent; slightly alkaline (pH 7.7); clear wavy boundary.

Bk2—12 to 18 inches; light gray (10YR 7/2) very gravelly loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine and few fine and medium tubular pores; 40 percent fine gravel; violently effervescent; 1-millimeter-thick coatings of secondary carbonates on all sides of rock fragments and common fine filaments and masses of secondary carbonates; slightly alkaline (pH 7.8); clear wavy boundary.

Bk3—18 to 27 inches; very pale brown (10YR 8/2) very gravelly loam, light yellowish brown (10YR 6/4) moist; weak fine subangular blocky structure parting to weak fine granular; hard, very friable, nonsticky and nonplastic; few very fine roots; common very fine to medium tubular pores; 45 percent gravel; violently effervescent; 1-millimeter-thick coatings of secondary carbonates on all sides of rock fragments and many fine filaments and masses of secondary carbonates; pockets of weak cementation at a depth of 27 inches; slightly alkaline (pH 7.8); clear wavy boundary.

Bk4—27 to 60 inches; very pale brown (10YR 8/2) extremely cobbly loam, very pale brown (10YR 8/4) moist; weak fine subangular blocky structure parting to weak fine granular; hard, very friable, nonsticky and nonplastic; common very fine vesicular pores; 30 percent gravel, 35 percent cobbles, and 1 percent stones; violently effervescent; 1-millimeter-thick coatings of secondary carbonates on all sides of rock fragments and many fine filaments and masses of secondary carbonates; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—8 to 13 inches
Depth to calcic horizon—7 to 13 inches

Particle-size control section (average):
Clay content—10 to 15 percent
Rock fragment content—40 to 70 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk1 horizon:
Value—5 to 8 dry, 2 or 3 moist
Chroma—2 or 3 dry, 3 or 4 moist
Texture—gravelly loam or gravelly silt loam
Calcium carbonate equivalent—15 to 35 percent

Bk2, Bk3, and Bk4 horizons:
Value—7 or 8 dry, 4 to 8 moist
Chroma—2 to 4 dry or moist
Texture—very gravelly loam, extremely cobbly loam, or extremely gravelly loam
Calcium carbonate equivalent—15 to 35 percent

Other Features

The Cedarhill soils in this survey area do not have an nonconformable C horizon, which is outside the range for the official series. This difference, however, does not affect the use and management of these soils.

Clayburn Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains
Parent material: Kind—colluvium and alluvium; source—sedimentary rock
Slope range: 20 to 60 percent
Elevation: 6,500 to 7,500 feet
Mean annual precipitation: 20 to 22 inches
Mean annual air temperature: 39 to 42 degrees F
Frost-free period: 50 to 70 days

Taxonomic class: Fine-loamy, mixed Argic Pachic Cryoborolls

Typical Pedon

Clayburn silt loam in an area of Hymas-Northwater-Clayburn association, 20 to 60 percent slopes; about 6 miles south of Malad City, in Oneida County, Idaho; about 500 feet east and 2,700 feet south of the northwest corner of sec. 11, T. 16 S., R. 35 E.; colors in this pedon description are for moist soil unless otherwise noted.

A1—0 to 4 inches; very dark brown (10YR 2/2) silt loam, dark grayish brown (10YR 4/2) dry; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine to coarse roots; common very fine tubular pores and many very fine vesicular pores; 10 percent gravel; neutral (pH 7.2); clear wavy boundary.

A2—4 to 11 inches; very dark brown (10YR 2/2) loam, dark grayish brown (10YR 4/2) dry; weak very fine, fine, and medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many very fine and common fine to coarse roots; common very fine tubular and vesicular pores; 10 percent gravel and 1 percent stones; neutral (pH 7.2); clear wavy boundary.

A3—11 to 21 inches; very dark grayish brown (10YR 3/2) loam, grayish brown (10YR 5/2) dry; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine and few fine tubular pores and common very fine vesicular pores; 10 percent gravel, 3 percent cobbles, and 1 percent stones; neutral (pH 7.1); abrupt wavy boundary.

Bt1—21 to 25 inches; brown (7.5YR 4/4) cobbly clay loam, light yellowish brown (10YR 6/4) dry; moderate fine and medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and coarse and few fine and medium roots; common very fine and few fine tubular pores and common very fine vesicular pores; 5 percent gravel, 10 percent cobbles, and 1 percent stones; neutral (pH 7.0); clear wavy boundary.

Bt2—25 to 39 inches; yellowish brown (10YR 5/4) cobbly clay loam, light yellowish brown (10YR 6/4) dry; moderate fine and medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and coarse and few fine and medium roots; common very fine and few fine tubular pores and common very fine vesicular pores; 5 percent gravel, 10 percent cobbles, and 1 percent stones; neutral (pH 7.1); clear wavy boundary.

C1—39 to 47 inches; dark yellowish brown (10YR 4/4) cobbly clay loam, yellowish brown (10YR 5/4) dry; massive; hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and few fine tubular pores and common very fine vesicular pores; 10 percent gravel and 15 percent cobbles; neutral (pH 7.2); abrupt wavy boundary.

C2—47 to 60 inches; dark yellowish brown (10YR 4/4) cobbly clay loam, yellowish brown (10YR 5/4) dry; massive; very hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; common very fine and few fine tubular pores and common very fine vesicular pores; 10 percent gravel and 20 percent cobbles; neutral (pH 7.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—16 to 25 inches
Depth to argillic horizon—21 to 24 inches

Particle-size control section (average):
Clay content—27 to 33 percent
Rock fragment content—15 to 25 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Hue—10YR or 7.5YR
Value—5 or 6 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist

C horizon:
Value—5 or 6 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist

Other Features

The Clayburn soils in this survey area have a xeric moisture regime and support dominantly mountain big sagebrush and bluebunch wheatgrass. The official series has a udic moisture regime but supports similar kinds of vegetation. This difference, however, does not affect the use and management of the soils.

Collinston Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—tuff, tuffaceous sandstone, limestone, and conglomerate
Slope range: 0 to 12 percent
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 110 days

Taxonomic class: Fine-silty, mixed, mesic Typic Calcixerolls

Typical Pedon

Collinston silt loam in an area of Collinston-Kearns complex, 2 to 12 percent slopes; about 3.5 miles north and 2 miles east of Holbrook, in Oneida County, Idaho; about 2,200 feet east and 200 feet south of the northwest corner of sec. 16, T. 14 S., R. 33 E.

Ap—0 to 8 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; few coarse, common medium, and many fine and very fine roots; few medium and many fine and very fine tubular pores; strongly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

A—8 to 12 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few coarse and medium and many fine and very fine roots; few medium and many fine and very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bk—12 to 20 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; weak very fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few medium and common fine and very fine roots; few fine and many very fine tubular pores; violently effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

C—20 to 60 inches; very pale brown (10YR 8/3) silt loam, light gray (10YR 7/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few medium and common fine and very fine roots; common fine and very fine tubular pores; violently effervescent; strongly alkaline (pH 8.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—9 to 20 inches
Depth to secondary carbonates—9 to 20 inches

Particle-size control section (average):
Clay content—18 to 26 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist

Bk horizon:
Value—6 to 8 dry, 5 to 7 moist
Chroma—1 to 3 dry or moist
Calcium carbonate equivalent—30 to 40 percent

C horizon:
Value—7 or 8 dry, 6 or 7 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or silty clay loam

Copenhagen Series

Depth class: Shallow to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains and ridges

Parent material: Kind—alluvium with an influence of loess; source—tuff and tuffaceous sedimentary rock
Slope range: 12 to 50 percent
Elevation: 4,900 to 6,200 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 95 days

Taxonomic class: Ashy-skeletal, frigid Lithic Haploxerolls

Typical Pedon

Copenhagen very channery loam in an area of Copenhagen-Lonigan-Manila association, 12 to 50 percent slopes; about 5 miles northeast of Malad City, in Oneida County, Idaho; about 1,000 feet south and 1,300 feet east of the northwest corner of sec. 6, T. 14 S., R. 37 E.

A—0 to 6 inches; gray (10YR 5/1) very channery loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine tubular pores; 35 percent channers; neutral (pH 7.0); clear smooth boundary.
Bw—6 to 14 inches; gray (10YR 5/1) very channery loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine tubular pores; 35 percent channers and 5 percent flagstones; neutral (pH 7.2); clear wavy boundary.
R—14 inches; consolidated tuff.

Range in Characteristics

Profile:
Thickness of mollic epipedon—4 to 16 inches
Depth to bedrock—10 to 20 inches

Particle-size control section (average):
Clay content—15 to 25 percent
Rock fragment content—35 to 85 percent

A horizon:
Hue—10YR or 2.5Y
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bw horizon:
Hue—10YR or 2.5Y
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist
Texture—very gravelly loam, very channery loam, or extremely channery loam

Darkbull Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants
Parent material: Kind—alluvium; source—mixed
Slope range: 1 to 30 percent
Elevation: 4,400 to 5,000 feet

Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Loamy-skeletal, mixed, mesic Sodic Xeric Haplocalcids

Typical Pedon

Darkbull gravelly loam in an area of Ecur-Darkbull complex, 1 to 8 percent slopes; about 15 miles west and 7 miles south of Holbrook, in Oneida County, Idaho; about 900 feet east and 900 feet south of the northwest corner of sec. 34, T. 15 S., R. 30 E.

A—0 to 3 inches; light brownish gray (10YR 6/2) gravelly loam, dark brown (10YR 3/3) moist; moderate medium platy structure parting to moderate very thin and thin platy; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine tubular pores; 15 percent gravel; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bw—3 to 10 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; 20 percent gravel; strongly effervescent; common coatings of secondary carbonates on underside of rock fragments; strongly alkaline (pH 8.6); clear smooth boundary.

Bk1—10 to 43 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine tubular pores; 40 percent gravel; violently effervescent; common coatings of secondary carbonates on underside of rock fragments; strongly alkaline (pH 8.8); clear smooth boundary.

Bk2—43 to 60 inches; extremely gravelly sandy loam with variegated colors; massive; 80 percent gravel; violently effervescent; common coatings of secondary carbonates on underside of rock fragments; strongly alkaline (pH 8.8).

Range in Characteristics

Profile:
Depth to calcic horizon—6 to 10 inches

Particle-size control section (average):
Clay content—6 to 15 percent
Rock fragment content—35 to 70 percent

A horizon:
Value—6 or 7 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly sandy loam and extremely gravelly sandy loam
Calcium carbonate equivalent—10 to 25 percent
Sodium adsorption ratio—10 to 30 in the upper part and 5 to 13 in the lower part

Other Features

The Darkbull soils in this survey area are shallower to the very gravelly layer than is the official series and they do not have a 2C horizon. Also, the gravel content in the

Bk2 horizon is higher than that of the official series and the sodium adsorption ratio in the lower part of the profile is lower than that of the official series. These differences, however, do not affect the use and management of these soils.

DeJarnet Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—alluvium and reworked lacustrine deposits; source—quartzite, sandstone, and limestone
Slope range: 0 to 4 percent
Elevation: 4,900 to 5,100 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 120 to 130 days

Taxonomic class: Loamy-skeletal, mixed, mesic Calcic Pachic Haploxerolls

Typical Pedon

DeJarnet gravelly silt loam in an area of DeJarnet gravelly silt loam, 0 to 4 percent slopes; about 4 miles south of Juniper, in Oneida County, Idaho; about 600 feet east and 2,400 feet north of the southwest corner of sec. 21, T. 15 S., R. 30 E.

A1—0 to 3 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak thick platy structure parting to weak very thin platy; soft, very friable, slightly sticky and slightly plastic; many very fine roots; common very fine irregular and vesicular pores and few very fine tubular pores; 20 percent gravel; slightly alkaline (pH 7.5); abrupt smooth boundary.

A2—3 to 9 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure parting to weak fine and medium subangular blocky; slightly hard, friable, moderately sticky and slightly plastic; common very fine roots; common very fine tubular and irregular pores; 15 percent gravel; slightly alkaline (pH 7.7); abrupt wavy boundary.

AB—9 to 16 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine tubular and irregular pores and few fine tubular pores; 20 percent gravel; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bw—16 to 27 inches; brown (10YR 5/3) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine and few fine tubular pores and common very fine irregular pores; 30 percent gravel; slightly alkaline (pH 7.8); clear wavy boundary.

2Bk1—27 to 41 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine irregular pores and common fine tubular pores; 35 percent gravel and 15 percent cobbles; strongly effervescent; coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.4); abrupt wavy boundary.

2Bk2—41 to 62 inches; light gray (10YR 7/2) extremely gravelly loamy fine sand, pale brown (10YR 6/3) moist; single grain; loose, nonsticky and nonplastic; many very fine interstitial pores; 45 percent gravel and 25 percent cobbles; violently effervescent; coatings of secondary carbonates on rock fragments; strongly alkaline (pH 8.5).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 36 inches
Depth to secondary carbonates—20 to 36 inches

Particle-size control section (average):
Clay content—18 to 25 percent
Rock fragment content—35 to 60 percent

A and AB horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

2Bk horizon:
Hue—10YR or 7.5YR
Value—6 to 8 dry, 3 to 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—5 to 25 percent

Ecur Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately rapid
Landform: Lake terraces and fan remnants
Parent material: Kind—alluvium and lacustrine deposits with an influence of loess; source—sedimentary rock
Slope range: 0 to 30 percent
Elevation: 4,400 to 5,000 feet
Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 110 days

Taxonomic class: Coarse-loamy, mixed, mesic Sodic Xeric Haplocalcids

Typical Pedon

Ecur fine sandy loam, 0 to 4 percent slopes; about 5 miles south of Juniper, in Oneida County, Idaho; about 2,640 feet south and 450 feet west of the northeast corner of sec. 33, T. 15 S., R. 30 E.

A1—0 to 2 inches; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; moderate very thick platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine vesicular pores and common very fine tubular pores; 4 percent fine gravel; slightly effervescent; moderately alkaline (pH 8.1); abrupt smooth boundary.

A2—2 to 6 inches; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots and few fine roots; common very fine tubular pores; 4 percent fine gravel; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bw—6 to 15 inches; light brownish gray (10YR 6/2) fine sandy loam, grayish brown (10YR 5/2) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and medium and few fine roots; common very fine tubular pores; 5 percent gravel; strongly effervescent; moderately alkaline (pH 8.2); 5 to 10 percent rounded nodules; abrupt wavy boundary.

Bkn1—15 to 27 inches; light gray (2.5Y 7/2) fine sandy loam, grayish brown (2.5Y 5/2) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 5 percent gravel; violently effervescent; few fine very pale brown (10YR 8/2) threads of secondary carbonates, light gray (10YR 7/2) moist; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bkn2—27 to 37 inches; light gray (2.5Y 7/2) fine sandy loam, grayish brown (2.5Y 5/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine and fine roots; few very fine tubular pores; 5 percent gravel; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Cn1—37 to 44 inches; light gray (2.5Y 7/2) loamy fine sand, grayish brown (2.5Y 5/2) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine and common medium roots; few very fine tubular pores; 5 percent gravel; 15 percent rounded nodules; strongly effervescent; strongly alkaline (pH 8.5); clear wavy boundary.

Cn2—44 to 49 inches; pale yellow (2.5Y 8/2) gravelly loamy fine sand, grayish brown (2.5Y 5/2) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine and common medium roots; few very fine tubular pores; 20 percent gravel; strongly effervescent; strongly alkaline (pH 8.6); 15 percent rounded nodules; clear wavy boundary.

Cn3—49 to 60 inches; pale yellow (2.5Y 8/2) loamy fine sand, light brownish gray (2.5Y 6/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine roots; few very fine tubular pores; 2 percent gravel; strongly effervescent; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Depth to calcic horizon—10 to 30 inches

Particle-size control section (average):
Clay content—10 to 15 percent
Rock fragment content—0 to 10 percent gravel

A horizon:
Value—3 or 4 moist

Bw horizon:
Value—4 or 5 moist
Chroma—2 or 3 dry or moist

Bkn horizon:
Hue—10YR or 2.5Y
Value—5 or 6 moist
Chroma—2 or 3 dry or moist
Texture—fine sandy loam or loam
Sodium adsorption ratio—13 to 30

Cn horizon:
Hue—10YR or 2.5Y
Value—7 or 8 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist

Texture—loamy fine sand or gravelly loamy fine sand
Sodium adsorption ratio—13 to 30

Elevator Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Moderately well drained
Permeability: Slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—limestone, quartzite, sandstone, and tuff
Slope range: 0 to 12 percent
Elevation: 4,900 to 5,200 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-silty, mixed, frigid Calcic Argixerolls

Typical Pedon

Elevator silt loam, 0 to 4 percent slopes; about 17 miles southwest of Malad City, in Oneida County, Idaho; about 1,300 feet north and 100 feet west of the southeast corner of sec. 16, T. 16 S., R. 34 E.

Ap—0 to 10 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine tubular pores; slightly alkaline (pH 7.6); abrupt smooth boundary.

Bt1—10 to 16 inches; brown (10YR 5/3) silty clay loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine roots; many very fine tubular pores; 15 percent distinct clay films on faces of peds and lining pores; slightly alkaline (pH 7.6); clear smooth boundary.

Bt2—16 to 27 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; very hard, firm, moderately sticky and moderately plastic; few very fine roots; common very fine tubular pores; 70 percent distinct clay films on faces of peds and lining pores; slightly alkaline (pH 7.8); clear smooth boundary.

Btk—27 to 32 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 5/3) moist; moderate fine subangular blocky structure; very hard, very firm, moderately sticky and moderately plastic; few very fine roots; common very fine irregular pores; few fine prominent red (2.5YR 5/6) relict masses of iron accumulation; 70 percent distinct clay films on faces of peds and lining pores; slightly effervescent; common fine and medium masses of secondary carbonates; moderately alkaline (pH 8.0); abrupt smooth boundary.

Bk1—32 to 45 inches; light gray (10YR 7/2) silty clay loam, brown (10YR 5/3) moist; strong fine angular blocky structure; extremely hard, extremely firm, moderately sticky and moderately plastic; few very fine roots; few very fine irregular pores; many fine and medium prominent red (2.5YR 5/6) relict masses of iron accumulation; common fine organic stains on faces of peds; strongly effervescent; many fine and medium masses of secondary carbonates; 20 percent calcium carbonate equivalent; moderately alkaline (pH 8.2); clear wavy boundary.

Bk2—45 to 60 inches; light gray (10YR 7/2) silty clay loam, brown (10YR 5/3) moist;

strong fine angular blocky structure; extremely hard, extremely firm, moderately sticky and moderately plastic; few very fine irregular pores; few fine and medium prominent red (2.5YR 5/6) relict masses of iron accumulation; few organic stains on faces of peds; violently effervescent; many fine and medium masses of secondary carbonates; 25 percent calcium carbonate equivalent; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—11 to 19 inches
Depth to secondary carbonates—18 to 38 inches
Depth to seasonal high water table—60 to 72 inches in March through May (relict redoximorphic features not related to active water table)

Particle-size control section (average):
Clay content—28 to 35 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—5 or 6 dry, 3 to 5 moist
Chroma—2 to 4 dry or moist

Btk horizon:
Value—5 or 6 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist

Bk horizon:
Value—6 to 8 dry, 5 or 6 moist
Chroma—1 to 3 dry or moist
Calcium carbonate equivalent—15 to 35 percent

Freedom Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—sedimentary rock
Slope range: 0 to 4 percent
Elevation: 4,300 to 4,600 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 46 to 49 degrees F
Frost-free period: 100 to 110 days

Taxonomic class: Fine-silty, mixed, mesic Xeric Haplocalcids

Typical Pedon

Freedom silt loam in an area of Mellor-Freedom complex, 0 to 2 percent slopes; about 200 feet north of the Utah State line and 4 miles west of Interstate Highway 84, in Oneida County, Idaho; about 500 feet east and 200 feet north of the southwest corner of sec. 27, T. 16 S., R. 30 E.

A1—0 to 4 inches; light brownish gray (10YR 6/2) silt loam, brown (10YR 4/3) moist; weak very thick platy structure parting to weak very fine and fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine vesicular pores; slightly effervescent; moderately alkaline (pH 8.1); abrupt smooth boundary.

A2—4 to 9 inches; light brownish gray (10YR 6/2) silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine and medium roots; many very fine tubular pores and few very fine vesicular pores; slightly effervescent; moderately alkaline (pH 7.9); abrupt wavy boundary.

Bw—9 to 13 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine tubular pores and few very fine vesicular pores; strongly effervescent; moderately alkaline (pH 8.3); abrupt wavy boundary.

Bk1—13 to 19 inches; light gray (10YR 7/2) silt loam, pale brown (10YR 6/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine tubular pores; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

Bk2—19 to 34 inches; light gray (10YR 7/2) silt loam, grayish brown (10YR 5/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

C1—34 to 43 inches; light gray (10YR 7/2) silt loam, grayish brown (10YR 5/2) moist; massive; hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; strongly effervescent; strongly alkaline (pH 8.5); clear wavy boundary.

C2—43 to 60 inches; light gray (2.5Y 7/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; hard, firm, moderately sticky and moderately plastic; few very fine tubular pores; strongly effervescent; strongly alkaline (pH 8.5).

Range in Characteristics

Profile:
Depth to calcic horizon—13 to 22 inches

Particle-size control section (average):
Clay content—19 to 24 percent

A horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—15 to 40 percent

C horizon:
Hue—10YR or 2.5Y
Value—5 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silty clay loam

Other Features

The Freedom soils in this survey area have a thin Bw horizon, which is not typical for the series. This difference, however, does not affect the use and management of the soils.

Fridlo Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Moderately well drained
Permeability: Slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,500 feet
Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 120 to 130 days

Taxonomic class: Fine-silty, mixed, mesic Typic Natrixerolls

Typical Pedon

Fridlo silt loam, 0 to 2 percent slopes; about 5 miles south of Malad City, in Oneida County, Idaho; about 900 feet west and 2,900 feet north of the southwest corner of sec. 22, T. 16 S., R. 36 E.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) silt loam, very dark gray (10YR 3/1) moist; weak fine subangular blocky structure parting to strong medium granular; hard, friable, moderately sticky and moderately plastic; many very fine and fine roots; common fine tubular pores; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

A2—3 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark gray (10YR 3/1) moist; moderate fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; many very fine and few fine roots; common very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.3); gradual wavy boundary.

Btn1—7 to 16 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine and fine roots; few very fine tubular pores; 15 percent faint clay films on faces of peds and lining pores; slightly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Btn2—16 to 24 inches; pale brown (10YR 6/3) silty clay loam, dark grayish brown (10YR 4/2) moist; moderate medium prismatic structure parting to weak medium subangular blocky; hard, firm, moderately sticky and moderately plastic; few fine roots; few fine tubular pores; 40 percent distinct clay films on faces of peds and 70 percent prominent clay films lining pores; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk—24 to 30 inches; very pale brown (10YR 7/3) silty clay loam, brown (10YR 4/3) moist; weak medium prismatic structure parting to weak fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Ck—30 to 39 inches; light gray (10YR 7/2) silty clay loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; few organic stains in pores; few faint strong brown (7.5YR 5/6) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

C—39 to 60 inches; white (10YR 8/1) silt loam, light brownish gray (10YR 6/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few distinct olive gray (5Y 5/2) zones of iron depletion; few manganese concretions; all faces glisten with moisture; violently effervescent; moderately alkaline (pH 8.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—14 to 19 inches
Depth to calcic horizon—20 to 35 inches
Depth to seasonal high water table—39 to 72 inches in April through June

Particle-size control section (average):
Clay content—27 to 32 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist

Btn horizon:
Chroma—2 or 3 dry or moist
Value—5 or 6 dry, 3 to 5 moist
Sodium adsorption ratio—15 to 25

Bk and Ck horizons:
Hue—10YR or 2.5Y
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—15 to 35 percent

C horizon:
Hue—10YR or 2.5Y
Value—7 or 8 dry, 5 or 6 moist
Chroma—1 to 3 dry or moist

Goosenawt Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Flood plains
Parent material: Kind—alluvium over lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,400 to 5,000 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Fine-loamy, mixed, mesic Cumulic Haploxerolls

Typical Pedon

Goosenawt gravelly loam, 0 to 2 percent slopes; about 2 miles north and 1 mile east of Malad City, in Oneida County, Idaho; about 1,200 feet west and 300 feet south of the northeast corner of sec. 10, T. 14 S., R. 36 E.

A1—0 to 3 inches; gray (10YR 5/1) gravelly loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; many very fine and fine tubular pores; 1- to 2-centimeter-thick gravelly lens; 15 percent gravel; slightly alkaline (pH 7.8); clear smooth boundary.

A2—3 to 13 inches; dark gray (10YR 4/1) gravelly loam, very dark gray (10YR 3/1) moist; moderate fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine and fine tubular pores; 2-centimeter-thick silt loam stratum that is light brownish gray (10YR 6/2) moist and is at top of horizon; 20 percent gravel; slightly alkaline (pH 7.8); abrupt smooth boundary.

A3—13 to 24 inches; gray (10YR 5/1) gravelly loam, very dark gray (10YR 3/1) moist; weak medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine tubular pores; 2.5-centimeter-thick discontinuous laminated fine sandy loam lens that is dark grayish brown (10YR 4/2) moist and is at a depth of about 23 inches; 1- to 2-centimeter-thick gravelly lens; 25 percent gravel; slightly alkaline (pH 7.6); abrupt smooth boundary.

2Ab1—24 to 42 inches; very dark gray (10YR 3/1) clay loam, black (10YR 2/1) moist; weak coarse subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine to medium roots; common fine tubular pores; 1- to 2-centimeter-thick gravelly lens; 5 percent gravel; slightly alkaline (pH 7.4); clear smooth boundary.

2Ab2—42 to 58 inches; dark gray (10YR 4/1) clay loam, very dark gray (10YR 3/1) moist; weak fine subangular blocky structure parting to moderate medium granular structure; hard, friable, moderately sticky and moderately plastic; few very fine and fine and common medium roots; common medium tubular pores; 1- to 2-centimeter-thick gravelly lens; 5 percent gravel; slightly alkaline (pH 7.4); abrupt smooth boundary.

2Bkb1—58 to 64 inches; light brownish gray (10YR 6/2) silt loam, olive brown (2.5Y 4/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; few fine tubular pores; 1- to 2-centimeter-thick gravelly lens; 5 percent gravel; strongly effervescent; many threads and masses of secondary carbonates; slightly alkaline (pH 7.4); clear smooth boundary.

2Bkb2—64 to 74 inches; pale brown (10YR 6/3) loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine and fine and common medium roots; common fine tubular pores; 1- to 2-centimeter-thick gravelly lens; 10 percent gravel; slightly effervescent; slightly alkaline (pH 7.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—32 to 60 inches
Depth to buried Bk horizon—35 to 65 inches

Particle-size control section (average):
Clay content—20 to 30 percent
Rock fragment content—5 to 20 percent

A horizon:
Value—4 or 5 dry
Chroma—1 or 2 dry or moist

2Ab horizon:
Value—3 or 4 dry, 2 or 3 moist

2Bkb horizon:
Hue—10YR or 2.5Y
Chroma—2 to 4 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—0 to 5 percent

Hades Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Fan remnants and mountains
Parent material: Kind—alluvium and colluvium; source—sandstone, shale, and quartzite influenced by loess
Slope range: 4 to 50 percent
Elevation: 4,900 to 6,500 feet
Mean annual precipitation: 15 to 20 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 75 to 90 days

Taxonomic class: Fine-loamy, mixed, frigid Pachic Argixerolls

Typical Pedon

Hades silt loam in an area of Povey-Hades-Hondoho association, 10 to 50 percent slopes; about 3 miles west and 12 miles north of Daniels Reservoir, in Oneida County, Idaho; about 1,000 feet west and 1,000 feet south of the northeast corner of sec. 4, T. 11 S., R. 34 E.

A1—0 to 5 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine, medium, and coarse roots; many very fine irregular pores and common very fine tubular pores; 5 percent gravel; neutral (pH 7.3); clear wavy boundary.

A2—5 to 9 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and common fine to coarse roots; common very fine irregular pores and few fine tubular pores; 10 percent gravel; neutral (pH 7.3); clear wavy boundary.

AB—9 to 12 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and irregular pores; 10 percent gravel; neutral (pH 7.3); clear wavy boundary.

Bt1—12 to 20 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine, medium, and coarse and few fine roots; common very fine and fine tubular pores and few very fine irregular pores; 15 percent faint clay films on faces of peds and lining pores; 10 percent gravel; neutral (pH 7.3); clear wavy boundary.

Bt2—20 to 32 inches; brown (7.5YR 5/4) silty clay loam, brown (7.5YR 4/4) moist; moderate medium and coarse angular blocky structure; very hard, firm, moderately sticky and moderately plastic; common very fine and medium and few fine and coarse roots; common very fine and few fine tubular pores; many decayed root mats and organic stains on faces of peds; 70 percent distinct clay films on faces of peds and lining pores; 5 percent gravel; neutral (pH 7.2); gradual wavy boundary.

Bt3—32 to 42 inches; brown (7.5YR 5/4) silty clay loam, brown (7.5YR 4/4) moist; moderate medium and coarse angular blocky structure; very hard, firm, moderately sticky and moderately plastic; few fine and coarse and common very fine and medium roots; common very fine and few fine tubular pores; 70 percent distinct clay films on faces of peds and lining pores; 5 percent gravel; neutral (pH 7.2); abrupt wavy boundary.

Bt4—42 to 60 inches; yellowish brown (10YR 5/4) gravelly silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine to coarse roots; common very fine and few fine tubular pores; 15 percent faint clay films on faces of peds and lining pores; 15 percent gravel and 5 percent cobbles; neutral (pH 7.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 50 inches
Depth to calcareous material—54 inches or more

Particle-size control section (average):
Clay content—25 to 35 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 to 4 dry, 1 to 3 moist

Bt horizon:
Hue—10YR or 7.5YR
Value—4 to 7 dry, 2 to 5 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silty clay loam in the upper part and gravelly silty clay loam below a depth of 40 inches
Rock fragment content—0 to 30 percent

Hans Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,400 to 4,900 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 120 to 130 days

Taxonomic class: Fine-silty, mixed, mesic Calcixerollic Xerochrepts

Typical Pedon

Hans silt loam, 0 to 2 percent slopes; about 2 miles west and 4 miles south of Malad City, in Oneida County, Idaho; about 2,520 feet north and 120 feet east of the southwest corner of sec. 6, T. 15 S., R. 36 E.

Ap—0 to 10 inches; light brownish gray (2.5Y 6/2) silt loam, dark brown (10YR 3/3) moist; strong fine granular structure; slightly hard, very friable, moderately sticky and moderately plastic; many very fine and common fine roots; many very fine irregular and tubular pores; slightly alkaline (pH 7.6); clear smooth boundary.

AB—10 to 18 inches; light brownish gray (2.5Y 6/2) silty clay loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; hard, very friable, moderately sticky and moderately plastic; common very fine roots; many very fine irregular and tubular pores; slightly alkaline (pH 7.6); clear smooth boundary.

Bw—18 to 26 inches; light brownish gray (2.5Y 6/2) silty clay loam, brown (10YR 4/3) moist; strong fine and medium subangular blocky structure; hard, friable, very sticky and moderately plastic; few very fine roots; common very fine irregular pores and few very fine tubular pores; slightly alkaline (pH 7.6); clear smooth boundary.

Bk1—26 to 31 inches; light brownish gray (2.5Y 6/2) silty clay loam, brown (10YR 5/3) moist; moderate medium subangular blocky structure; hard, firm, very sticky and moderately plastic; few very fine roots; few very fine and fine tubular and irregular pores; many coarse distinct light brownish gray (10YR 6/2) zones of iron depletion; strongly effervescent; few fine masses of secondary carbonates; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bk2—31 to 41 inches; light gray (2.5Y 7/2) silty clay loam, pale brown (10YR 6/3) moist; moderate fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; few fine distinct strong brown (7.5YR 5/6) masses of iron accumulation; violently effervescent; few fine masses of secondary carbonates; moderately alkaline (pH 8.0); clear smooth boundary.

Bk3—41 to 60 inches; light gray (2.5Y 7/2) silty clay loam, light brownish gray (10YR 6/2) moist; strong fine subangular blocky structure; hard, very firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; many coarse prominent strong brown (7.5YR 5/6) masses of iron accumulation; violently effervescent; many fine masses of secondary carbonates; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Depth to calcic horizon—10 to 30 inches

Particle-size control section (average):
Clay content—27 to 34 percent

Ap horizon:
Hue—2.5Y or 10YR
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

AB and Bw horizons:
Hue—2.5Y or 10YR
Value—6 or 7 dry, 3 to 5 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—2.5Y or 10YR
Value—6 or 7 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—15 to 25 percent

Highcreek Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces and fan remnants
Parent material: Kind—lacustrine deposits and alluvium; source—mixed
Slope range: 4 to 25 percent
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-loamy, mixed, mesic Calcic Haploxerolls

Typical Pedon

Highcreek silt loam in an area of Highcreek-Sterling complex, 4 to 12 percent slopes; about 1.5 miles southwest of Woodruff, in Oneida County, Idaho; about 300 feet north and 50 feet east of the southwest corner of sec. 28, T. 16 S., R. 36 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; many fine and very fine irregular pores; 10 percent gravel and 1 percent cobbles; slightly alkaline (pH 7.5); clear wavy boundary.

A—7 to 16 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine tubular pores; 10 percent gravel and 2 percent cobbles; slightly effervescent; 7 percent calcium carbonate equivalent; moderately alkaline (pH 8.0); clear wavy boundary.

Bk1—16 to 26 inches; light brownish gray (10YR 6/2) silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; many very fine tubular pores; 10 percent gravel and 2 percent cobbles; strongly effervescent; few coatings of secondary carbonates on underside of rock fragments and common medium threads of secondary carbonates in matrix; 10 percent calcium carbonate equivalent; moderately alkaline (pH 8.1); abrupt smooth boundary.

Bk2—26 to 38 inches; very pale brown (10YR 7/3) gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common fine tubular pores; 15 percent gravel and 2 percent cobbles; violently effervescent; many coatings of secondary carbonates on rock fragments and many fine and medium threads of secondary carbonates in matrix; 25 percent calcium carbonate equivalent; moderately alkaline (pH 8.1); clear wavy boundary.

Bk3—38 to 49 inches; pale brown (10YR 6/3) gravelly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common fine tubular pores; 15 percent gravel and 3 percent cobbles; strongly effervescent; common coatings of secondary carbonates on rock fragments and few fine threads of secondary carbonates in matrix; 11 percent calcium carbonate equivalent; moderately alkaline (pH 8.1); abrupt wavy boundary.

Bk4—49 to 66 inches; very pale brown (10YR 7/3) gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 15 percent gravel and 5 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments and many fine and medium threads of secondary carbonates in matrix; 30 percent calcium carbonate equivalent; moderately alkaline (pH 8.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 18 inches
Depth to secondary carbonates—7 to 26 inches

Particle-size control section (average):
Clay content—18 to 27 percent
Rock fragment content—5 to 15 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or gravelly loam
Rock fragment content—5 to 25 percent
Calcium carbonate equivalent—5 to 30 percent

Hillfield Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Dissected lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 4 to 50 percent
Elevation: 4,400 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 120 days

Taxonomic class: Coarse-silty, mixed, mesic Calcixerollic Xerochrepts

Typical Pedon

Hillfield silt loam in an area of Hillfield-Kucera complex, 30 to 50 percent slopes; about 3 miles west and 1.5 miles north of Malad City, in Oneida County, Idaho; about 1,800 feet east and 1,700 feet north of the southwest corner of sec. 12, T. 14 S., R. 35 E.

A—0 to 7 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and nonplastic; common coarse to very fine roots; few medium and many fine and very fine irregular pores; strongly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—7 to 16 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few coarse and medium and many fine and very fine roots;

few medium and many fine and very fine tubular pores; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2—16 to 38 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak thin platy structure; hard, friable, slightly sticky and slightly plastic; common medium and many fine and very fine roots in vertical cracks; many very fine irregular pores; many manganese coatings on faces of plates; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

C—38 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak thin platy structure; hard, friable, slightly sticky and nonplastic; common fine and very fine roots in vertical cracks; many very fine irregular pores; common distinct strong brown (7.5YR 5/6) relict masses of iron accumulation; slightly effervescent; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Depth to secondary carbonates—2 to 8 inches

Particle-size control section (average):
Clay content—10 to 17 percent

A horizon:
Value—5 to 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist

Bk and C horizons:
Value—5 to 7 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or very fine sandy loam
Calcium carbonate equivalent—10 to 30 percent

Hondoho Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants, hills, and mountains
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 70 percent
Elevation: 5,000 to 6,700 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 75 to 100 days

Taxonomic class: Loamy-skeletal, mixed, frigid Calcic Haploxerolls

Typical Pedon

Hondoho gravelly silt loam in an area of Ridgecrest-Hondoho complex, 30 to 60 percent slopes; about 0.5 mile northeast of top of Jensen Pass, in Oneida County, Idaho; about 1,200 feet north and 2,500 feet east of the southwest corner of sec. 29, T. 12 S., R. 34 E.

Ap—0 to 4 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine, medium, and coarse roots; common very fine tubular pores; 20 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.6); clear wavy boundary.

AB—4 to 12 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate very fine and fine subangular blocky structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular pores; 20 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bw—12 to 14 inches; grayish brown (10YR 5/2) gravelly silt loam, dark brown (10YR 3/3) moist; moderate very fine, fine, and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular pores; 15 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.5); clear wavy boundary.

Bk1—14 to 19 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; weak very fine, fine, and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular pores; 15 percent gravel and 30 percent cobbles; strongly effervescent; slightly alkaline (pH 7.6); gradual wavy boundary.

Bk2—19 to 28 inches; pale brown (10YR 6/3) very cobbly loam, brown (10YR 4/3) moist; weak fine, medium, and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, medium, and coarse and few fine roots; common very fine and few fine tubular pores; 25 percent gravel and 25 percent cobbles; strongly effervescent; 1- to 2-millimeter-thick coatings of secondary carbonates on rock fragments; slightly alkaline (pH 7.8); clear wavy boundary.

Bk3—28 to 43 inches; very pale brown (10YR 7/3) very cobbly loam, pale brown (10YR 6/3) moist; weak fine, medium, and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine and fine roots; few very fine tubular pores; 25 percent gravel and 25 percent cobbles; violently effervescent; 1- to 2-millimeter-thick coatings of secondary carbonates on rock fragments; moderately alkaline (pH 7.9); gradual wavy boundary.

Bk4—43 to 60 inches; very pale brown (10YR 7/3) very cobbly loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine tubular pores; 15 percent gravel and 40 percent cobbles; strongly effervescent; 1- to 2-millimeter-thick coatings of secondary carbonates on rock fragments; moderately alkaline (pH 7.9).

Range in Characteristics

Profile:
Thickness of mollic epipedon—12 to 16 inches
Depth to secondary carbonates—12 to 16 inches

Particle-size control section (average):
Clay content—18 to 26 percent
Rock fragment content—35 to 50 percent

Ap and AB horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—3 or 4 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly silt loam, very gravelly loam, very cobbly loam, or very gravelly coarse sandy loam
Calcium carbonate equivalent—5 to 40 percent

Hutchley Series

Depth class: Shallow to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Hills on lava plains
Parent material: Kind—residuum and colluvium; source—basalt
Slope range: 4 to 40 percent
Elevation: 5,200 to 6,200 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, mixed, frigid Lithic Argixerolls

Typical Pedon

Hutchley gravelly loam in an area of Hutchley-McCarey-Araveton complex, 4 to 40 percent slopes; about 6 miles west and 2 miles south of Holbrook, in Oneida County, Idaho; about 100 feet east and 900 feet north of the southwest corner of sec. 6, T. 15 S., R. 32 E.

A—0 to 6 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark brown (10YR 2/2) moist; weak medium and thick platy structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and medium roots and few fine and coarse roots; many very fine vesicular pores and common very fine tubular pores; 15 percent gravel and 2 percent stones; neutral (pH 7.2); abrupt irregular boundary.
Bt—6 to 13 inches; brown (10YR 4/3) very cobbly clay loam, dark brown (10YR 3/3) moist; weak fine, medium, and coarse subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine roots and few fine to coarse roots; common very fine tubular pores; 40 percent faint clay films on faces of peds and lining pores; 15 percent gravel, 35 percent cobbles, and 8 percent stones; neutral (pH 7.3); abrupt irregular boundary.
R—13 inches; hard, fractured basalt.

Range in Characteristics

Profile:
Thickness of mollic epipedon—12 to 20 inches
Depth to bedrock—12 to 20 inches

Particle-size control section (average):
Clay content—24 to 35 percent
Rock fragment content—45 to 70 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly clay loam, very cobbly clay loam, or extremely cobbly clay loam

Hymas Taxadjunct

Depth class: Shallow to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains and ridges
Parent material: Kind—residuum and alluvium influenced by loess; source—limestone
Slope range: 12 to 70 percent
Elevation: 5,000 to 7,700 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Lithic Calcixerolls

Typical Pedon

Hymas very cobbly loam in an area of Hymas-Calpac-Ireland association, 30 to 70 percent slopes; about 0.5 mile south of the Bannock County line, in Oneida County, Idaho; about 2,200 feet west and 2,800 feet north of the southeast corner of sec. 4, T. 11 S., R. 34 E.

A—0 to 2 inches; grayish brown (10YR 5/2) very cobbly loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; few very fine and fine tubular pores and many very fine irregular pores; 30 percent gravel, 20 percent cobbles, and 5 percent stones; strongly effervescent; moderately alkaline (pH 7.9); abrupt wavy boundary.

Bk1—2 to 7 inches; brown (10YR 5/3) very cobbly silt loam, dark brown (10YR 3/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine tubular and irregular pores; 15 percent gravel, 25 percent cobbles, and 5 percent stones; strongly effervescent; coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.1); clear wavy boundary.

Bk2—7 to 11 inches; pale brown (10YR 6/3) extremely cobbly loam, brown (10YR 4/3) moist; weak very fine subangular blocky structure parting to single grain; slightly hard, very friable, slightly sticky and slightly plastic; few very fine to medium roots; few very fine tubular pores and many very fine irregular pores; 20 percent gravel, 55 percent cobbles, and 5 percent stones; strongly effervescent; coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.1); abrupt irregular boundary.

R—11 inches; highly fractured limestone.

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 14 inches
Depth to calcic horizon—2 to 10 inches
Depth to bedrock—10 to 20 inches

Particle-size control section (average):
Clay content—12 to 15 percent
Rock fragment content—40 to 75 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR or 2.5Y
Value—5 to 8 dry, 3 to 7 moist
Chroma—2 or 3 dry or moist
Texture—very cobbly silt loam, very gravelly loam, very cobbly loam, very stony loam, or extremely cobbly loam
Calcium carbonate equivalent—10 to 45 percent in the Bk1 horizon and 40 to 50 percent in Bk2 horizon

Taxadjunct Feature

The Hymas soils in this survey area have a calcic horizon, which is outside the range for the official series. This difference, however, does not affect the use and management of the soils.

Inkom Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Poorly drained
Permeability: Moderate
Landform: Flood plains
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 1 percent
Elevation: 5,000 to 5,600 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-silty, mixed (calcareous), frigid Cumulic Endoaquolls

Typical Pedon

Inkom silt loam, 0 to 1 percent slopes; about 6 miles north of Daniels, in Oneida County, Idaho; about 2,500 feet east and 2,210 feet north of the southwest corner of sec. 18, T. 11 S., R. 35 E.; colors in this pedon description are for moist soil unless otherwise noted.

A—0 to 2 inches; very dark gray (10YR 3/1) silt loam, dark grayish brown (10YR 4/2) dry; weak fine granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots; few medium and common very fine and fine tubular pores; slightly effervescent; moderately alkaline (pH 8.1); clear smooth boundary.
Ag—2 to 6 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; weak very fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; many very fine and fine roots; few medium and many very fine tubular pores; common fine prominent dark yellowish brown (10YR 4/6) masses of iron accumulation; slightly effervescent; moderately alkaline (pH 8.1); clear smooth boundary.
Bg1—6 to 8 inches; black (10YR 2/1) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly

plastic; common very fine and fine roots; common very fine and fine tubular pores; common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bg2—8 to 12 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; strong fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; few medium and many very fine and fine tubular pores; few fine prominent dark yellowish brown (10YR 4/6) masses of iron accumulation; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Agb—12 to 25 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; strong fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine and fine tubular pores; few medium prominent yellowish brown (10YR 5/4) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bgb—25 to 32 inches; dark grayish brown (10YR 4/2) silt loam, light gray (10YR 7/1) dry; moderate fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; common medium distinct light yellowish brown (10YR 6/4) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Cg1—32 to 48 inches; grayish brown (2.5Y 5/2) silt loam, white (10YR 8/1) dry; massive; hard, firm, moderately sticky and moderately plastic; few fine prominent olive yellow (2.5Y 6/6) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Cg2—48 to 60 inches; dark grayish brown (2.5Y 4/2) silt loam, light gray (2.5Y 7/2) dry; massive; hard, friable, slightly sticky and slightly plastic; many medium prominent light olive brown (2.5Y 5/6) masses of iron accumulation; strongly effervescent; slightly alkaline (pH 7.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—24 to 31 inches
Depth to seasonal high water table—at the surface to a depth of 18 inches below the surface in February through June

Particle-size control section (average):
Clay content—18 to 27 percent

A, Ag, and Agb horizons:
Value—3 to 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bg and Bgb horizons:
Value—4 to 7 dry, 2 to 4 moist
Chroma—1 or 2 dry or moist

Cg horizon:
Hue—2.5Y or 10YR
Value—7 or 8 dry, 4 or 5 moist
Chroma—1 or 2 dry or moist

Iphil Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate

Landform: Fan remnants and hills
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 2 to 30 percent
Elevation: 5,000 to 5,900 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Typic Calcixerolls

Typical Pedon

Iphil silt loam in an area of Ririe-Iphil-Rexburg complex, 4 to 12 percent slopes; about 6 miles northwest of Malad City, in Oneida County, Idaho; about 1,200 feet west and 1,850 feet south of the northeast corner of sec. 6, T. 13 S., R. 35 E.

Ap—0 to 10 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak very fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine irregular pores and common very fine and fine tubular pores; strongly effervescent; slightly alkaline (pH 7.8); clear wavy boundary.

Bk1—10 to 21 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and fine tubular pores; violently effervescent; common fine masses and threads of secondary carbonates; moderately alkaline (pH 8.2); gradual wavy boundary.

Bk2—21 to 36 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and fine tubular pores; violently effervescent; common fine masses and threads of secondary carbonates; strongly alkaline (pH 8.6); clear wavy boundary.

Bk3—36 to 50 inches; very pale brown (10YR 7/3) loam, brown (10YR 5/3) moist; weak very fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine irregular and tubular pores; strongly effervescent; 5 to 10 percent carbonate nodules 3 to 8 millimeters in diameter; discontinuous very weak cementation with secondary carbonates; strongly alkaline (pH 8.8); gradual wavy boundary.

C—50 to 60 inches; very pale brown (10YR 7/3) loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine tubular pores; strongly effervescent; strongly alkaline (pH 8.9).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 15 inches
Depth to calcic horizon—7 to 16 inches

Particle-size control section (average):
Clay content—10 to 18 percent
Content of sand that is coarser than very fine sand—2 to 10 percent
Rock fragment content—0 to 3 percent gravel

Ap horizon:
Chroma—2 or 3 dry or moist

Bk1 and Bk2 horizons:
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist

Texture—silt loam or loam
Calcium carbonate equivalent—15 to 35 percent

Bk3 and C horizons:
Value—7 or 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Texture—loam or silt loam
Calcium carbonate equivalent—10 to 15 percent

Ireland Series

Depth class: Moderately deep to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains and ridges
Parent material: Kind—colluvium, alluvium, and residuum; source—limestone and dolostone
Slope range: 30 to 70 percent
Elevation: 5,200 to 7,200 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, mixed, frigid Calcic Haploxerolls

Typical Pedon

Ireland very gravelly silt loam in an area of Ireland-Calpac association, 30 to 60 percent slopes; about 0.75 mile north of Holbrook Summit, on North Canyon Road, in Oneida County, Idaho; about 2,000 feet south and 100 feet west of the northeast corner of sec. 27, T. 14 S., R. 34 E.

A—0 to 8 inches; grayish brown (10YR 5/2) very gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few fine and medium roots; few very fine tubular pores and common very fine irregular pores; 25 percent gravel and 10 percent cobbles; slightly alkaline (pH 7.8); abrupt wavy boundary.

ABk—8 to 16 inches; grayish brown (10YR 5/2) extremely cobbly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine, medium, and coarse roots; common very fine irregular pores and few very fine and fine tubular pores; 10 percent gravel and 60 percent cobbles; slightly effervescent; common coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.0); abrupt wavy boundary.

Bk—16 to 28 inches; brown (10YR 5/3) extremely cobbly silt loam, brown (10YR 4/3) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine to coarse roots; few very fine tubular pores; 10 percent gravel and 60 percent cobbles; strongly effervescent; common coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.1); abrupt wavy boundary.

R—28 inches; fractured limestone with carbonate coatings and soil material in fractures.

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 19 inches

Depth to secondary carbonates—8 to 24 inches
Depth to bedrock—20 to 40 inches

Particle-size control section (average):
Clay content—16 to 22 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

ABk and Bk horizons:
Hue—10YR or 7.5YR
Value—5 to 7 dry, 3 to 5 moist
Chroma—2 to 4 dry or moist
Texture—extremely cobbly silt loam, extremely stony silt loam, or extremely cobbly loam
Calcium carbonate equivalent—5 to 25 percent

Jensen Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and lake terraces
Parent material: Kind—alluvium and lacustrine deposits; source—mixed
Slope range: 0 to 30 percent
Elevation: 4,900 to 5,900 feet
Mean annual precipitation: 13 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-loamy, mixed, frigid Calcic Pachic Argixerolls

Typical Pedon

Jensen silt loam in an area of Elevator-Jensen complex, 4 to 12 percent slopes; about 12 miles southwest of Malad City, in Oneida County, Idaho; about 1,500 feet east and 300 feet north of the southwest corner of sec. 7, T. 16 S., R. 34 E.

Ap—0 to 6 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine roots; 10 percent gravel; neutral (pH 7.2); clear smooth boundary.

A—6 to 12 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; 10 percent gravel; slightly alkaline (pH 7.4); clear smooth boundary.

Bt1—12 to 22 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; 20 percent gravel; 15 percent faint clay films lining pores; slightly alkaline (pH 7.6); clear wavy boundary.

Bt2—22 to 38 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; hard, very firm, slightly sticky and slightly plastic; common very fine and few fine roots; 20 percent gravel;

15 percent faint clay films lining pores; slightly alkaline (pH 7.6); clear smooth boundary.

Bk1—38 to 45 inches; pale brown (10YR 6/3) gravelly silt loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; very hard, very firm, slightly sticky and slightly plastic; few very fine roots; many very fine and fine tubular pores; 30 percent gravel and 1 percent cobbles; strongly effervescent; many threads of secondary carbonates; moderately alkaline (pH 8.0); clear wavy boundary.

Bk2—45 to 60 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; very hard, very firm, slightly sticky and slightly plastic; few very fine roots; 35 percent gravel and 1 percent cobbles; strongly effervescent; many threads of secondary carbonates; moderately alkaline (pH 7.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—31 to 45 inches
Depth to secondary carbonates—16 to 40 inches

Particle-size control section (average):
Clay content—18 to 25 percent
Rock fragment content—10 to 30 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 to 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—silt loam, gravelly silt loam, or gravelly loam

Bk horizon:
Hue—10YR or 7.5YR
Value—5 to 7 dry, 4 to 6 moist
Chroma—3 to 5 dry or most
Texture—gravelly silt loam, very gravelly loam, very gravelly silt loam, or gravelly loam
Rock fragment content—15 to 60 percent
Calcium carbonate equivalent—5 to 15 percent

Jovine Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Moderately well drained
Permeability: Moderate
Landform: Depressions and low stream terraces
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,900 to 5,200 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Cumulic Haploxerolls

Typical Pedon

Jovine silt loam, 0 to 2 percent slopes; about 7 miles north and 1 mile east of Holbrook, in Oneida County, Idaho; about 350 feet west and 50 feet north of the southeast corner of sec. 20, T. 13 S., R. 33 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; common very fine tubular and irregular pores; 3 percent gravel; neutral (pH 7.3); clear wavy boundary.

Bw1—7 to 18 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine tubular pores; 1 percent fine gravel; neutral (pH 7.2); gradual wavy boundary.

Bw2—18 to 29 inches; brown (10YR 5/3) silt loam, very dark brown (10YR 2/2) moist; weak fine prismatic structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; slightly alkaline (pH 7.8); gradual wavy boundary.

Bw3—29 to 44 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak medium prismatic structure parting to weak fine and medium subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and few fine tubular pores; slightly alkaline (pH 7.7); gradual wavy boundary.

Bw4—44 to 60 inches; dark grayish brown (10YR 4/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium prismatic structure parting to weak fine and medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine and few fine tubular pores; 5 percent weakly cemented groundwater carbonate nodules; 5 percent gravel; slightly alkaline (pH 7.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—45 to 60 inches
Depth to finely disseminated carbonates—more than 60 inches
Depth to seasonal high water table—60 to 72 inches in April through June

Particle-size control section (average):
Clay content—15 to 18 percent
Rock fragment content—0 to 5 percent gravel

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Justesen Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow

Landform: Fan remnants and hills
Parent material: Kind—alluvium; source—mixed igneous and sedimentary rock
Slope range: 4 to 25 percent
Elevation: 4,800 to 6,000 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-loamy, mixed, frigid Calcic Argixerolls

Typical Pedon

Justesen silt loam in an area of Justesen-Ririe-Buist complex, 12 to 20 percent slopes; about 5 miles north of Holbrook, in Oneida County, Idaho; about 500 feet west and 650 feet south of the northeast corner of sec. 1, T. 14 S., R. 32 E.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium roots; common very fine and fine tubular pores; 10 percent gravel; neutral (pH 7.2); clear wavy boundary.

Bt1—8 to 16 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; common fine and very fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and fine roots and few medium roots; common very fine and fine tubular pores; 40 percent faint clay films on faces of peds and lining pores; 10 percent gravel; neutral (pH 7.2); clear wavy boundary.

Bt2—16 to 27 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 4/3) moist; common fine and very fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine and few fine and medium roots; common very fine and fine tubular pores; 40 percent distinct clay films on faces of peds and lining pores; 10 percent gravel; neutral (pH 7.3); clear wavy boundary.

Bk1—27 to 45 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and fine tubular pores; 10 percent gravel; violently effervescent; many fine and medium masses and threads of secondary carbonates; slightly alkaline (pH 7.5); clear wavy boundary.

Bk2—45 to 55 inches; light yellowish brown (10YR 6/4) gravelly loam, brown (10YR 4/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; 15 percent gravel; violently effervescent; many fine and medium masses and threads of secondary carbonates; slightly alkaline (pH 7.8); clear wavy boundary.

Bk3—55 to 60 inches; very pale brown (10YR 7/3) gravelly loam, yellowish brown (10YR 5/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine tubular pores; 25 percent gravel; violently effervescent; many fine and medium masses and threads of secondary carbonates; slightly alkaline (pH 7.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—11 to 19 inches
Depth to secondary carbonates—24 to 40 inches

Particle-size control section (average):
Clay content—20 to 34 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 to 6 dry, 3 to 5 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silty clay loam

Bk horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—3 to 6 dry or moist
Texture—silt loam or gravelly loam
Rock fragment content—0 to 30 percent
Calcium carbonate equivalent—5 to 20 percent

Kearns Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 12 percent
Elevation: 4,400 to 5,200 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-silty, mixed, mesic Calcic Haploxerolls

Typical Pedon

Kearns silt loam, 0 to 2 percent slopes; about 9.5 miles south and 8 miles west of Holbrook, in Oneida County, Idaho; about 1,900 feet west and 75 feet south of the northeast corner of sec. 4, T. 16 S., R. 31 E.

A—0 to 8 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and thick platy structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; few coarse and common medium, fine, and very fine roots; common very fine irregular and tubular pores; slightly alkaline (pH 7.7); clear wavy boundary.

Bw—8 to 18 inches; light brownish gray (10YR 6/2) silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few coarse and common medium, fine, and very fine roots; few medium and fine and common very fine tubular pores; moderately alkaline (pH 7.9); gradual wavy boundary.

Bk1—18 to 32 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate medium and coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few medium and fine and common very fine roots; few very fine vesicular pores and common very fine tubular pores; slightly effervescent; few threads of secondary carbonates; moderately alkaline (pH 8.0); clear wavy boundary.

Bk2—32 to 57 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 4/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few fine and very fine roots; common very fine tubular and vesicular pores; strongly effervescent; few threads of secondary carbonates; moderately alkaline (pH 8.3); clear wavy boundary.

Bk3—57 to 67 inches; light gray (2.5Y 7/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; violently effervescent; common threads of secondary carbonates; strongly alkaline (pH 8.9).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 18 inches
Depth to secondary carbonates—14 to 30 inches

Particle-size control section (average):
Clay content—18 to 26 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw and Bk1 horizons:
Value—5 to 7 dry, 3 to 5 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—0 to 5 percent

Bk2 and Bk3 horizons:
Hue—10YR or 2.5Y
Value—5 to 8 dry, 3 to 6 moist
Chroma—2 to 4 dry or most
Texture—silt loam or very fine sandy loam
Calcium carbonate equivalent—5 to 25 percent

Kidman Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—lacustrine deposits and alluvium; source—mixed
Slope range: 1 to 6 percent
Elevation: 4,500 to 4,800 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Coarse-loamy, mixed, mesic Calcic Haploxerolls

Typical Pedon

Kidman fine sandy loam in an area of Kidman-Preston association, 2 to 12 percent slopes; about 4 miles west of Malad City, in Oneida County, Idaho; about 1,650 feet north and 350 feet east of the southwest corner of sec. 14, T. 14 S., R. 35 E.

A1—0 to 4 inches; brown (10YR 4/3) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and thick platy structure; soft, very friable, nonsticky and nonplastic; many fine and very fine roots; many very fine irregular pores; slightly alkaline (pH 7.4); abrupt smooth boundary.

A2—4 to 17 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; few fine and common very fine roots; many very fine irregular pores; slightly alkaline (pH 7.4); clear wavy boundary.

Bw—17 to 38 inches; light brownish gray (10YR 6/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few fine and common very fine roots; many very fine irregular pores; slightly alkaline (pH 7.4); clear wavy boundary.

Bk—38 to 66 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine roots; many very fine irregular pores; strongly effervescent; secondary carbonates finely disseminated in matrix; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—9 to 18 inches
Depth to secondary carbonates—20 to 40 inches

Particle-size control section (average):
Clay content—8 to 18 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—4 to 6 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—3 or 4 dry or most
Calcium carbonate equivalent—15 to 30 percent

Kucera Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces and fan remnants
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 2 to 50 percent
Elevation: 4,400 to 5,300 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 44 to 46 degrees F
Frost-free period: 90 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Calcic Pachic Haploxerolls

Typical Pedon

Kucera silt loam in an area of Rexburg-Ririe-Kucera complex, 2 to 8 percent slopes; about 17 miles north and 4 miles east of Holbrook, in Oneida County, Idaho; about 850 feet south and 50 feet west of the northeast corner of sec. 2, T. 12 S., R. 33 E.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; hard, very friable, slightly sticky and slightly plastic; few fine and common very fine roots; many very fine tubular pores; neutral (pH 7.0); clear smooth boundary.

A1—8 to 14 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few fine and common very fine roots; many very fine tubular pores; neutral (pH 7.0); clear smooth boundary.

A2—14 to 22 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine tubular pores; neutral (pH 7.0); clear smooth boundary.

Bw—22 to 42 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine tubular pores; 5 percent cicada krotovinas; neutral (pH 7.0); clear smooth boundary.

Bk—42 to 60 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine tubular pores; 5 percent cicada krotovinas; strongly effervescent; few threads of secondary carbonates; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—22 to 34 inches
Depth to secondary carbonates—20 to 42 inches

Particle-size control section (average):
Clay content—10 to 18 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—5 to 15 percent

Lagonot Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Somewhat poorly drained
Permeability: Moderate
Landform: Lake terraces and flood plains
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 3 percent
Elevation: 4,300 to 4,700 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 47 degrees F
Frost-free period: 100 to 110 days

Taxonomic class: Fine-silty, mixed, mesic Aquic Calcixerolls

Typical Pedon

Lagonot silt loam, 0 to 3 percent slopes; about 4 miles west and 2 miles south of Malad City, in Oneida County, Idaho; about 300 feet north and 1,450 feet east of the southwest corner of sec. 6, T. 15 S., R. 36 E.

A1—0 to 3 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; moderate thin platy structure; hard, very friable, slightly sticky and slightly plastic; many fine and very fine roots; common medium and many fine and very fine tubular pores; strongly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

A2—3 to 10 inches; grayish brown (2.5Y 5/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; weak medium and fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few medium and common fine and very fine roots; common fine and many very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bk1—10 to 19 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) moist; moderate fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; common medium and many fine and very fine roots; few medium and many fine and very fine tubular pores; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2—19 to 34 inches; light gray (2.5Y 7/2) silt loam, light brownish gray (2.5Y 6/2) moist; 40 percent fine faint pale brown (10YR 6/3) mottles; massive; hard, very friable, slightly sticky and slightly plastic; few fine and very fine roots; common medium and many fine and very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bk3—34 to 60 inches; pale yellow (2.5Y 8/2) silt loam, light brownish gray (2.5Y 6/2) moist; 70 percent fine faint pale brown (10YR 6/3) mottles; massive; hard, very friable, slightly sticky and slightly plastic; few very fine and fine roots; common medium and many fine and very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 19 inches
Depth to calcic horizon—10 to 19 inches
Depth to seasonal high water table—18 to 42 inches in October through June

Particle-size control section (average):
Clay content—18 to 24 percent

A horizon:
Hue—10YR or 2.5Y
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—15 to 35 percent

Langless Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Poorly drained

Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—alluvium and lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,500 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Coarse-silty, mesic Typic Calciaquolls

Typical Pedon

Langless silt loam in an area of Brinnum-Logan-Langless complex, 0 to 2 percent slopes; about 6 miles south of Malad City, in Oneida County, Idaho; about 1,900 feet west and 2,250 feet south of the northeast corner of sec. 20, T. 15 S., R. 36 E.; colors in this pedon description are for moist soil unless otherwise noted.

Oi—0 to 3 inches; live and decomposing grass stems and roots; abrupt smooth boundary.

Akg1—3 to 9 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; weak medium platy structure parting to moderate medium granular; slightly hard, very friable, slightly sticky and slightly plastic; many medium and common fine and very fine roots; many fine and very fine tubular pores; strongly effervescent; 35 percent calcium carbonate equivalent; moderately alkaline (pH 8.4); clear smooth boundary.

Akg2—9 to 18 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; moderate fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many medium and common fine and very fine roots; few medium and common fine and very fine tubular pores; strongly effervescent; 55 percent calcium carbonate equivalent; 20 percent fine masses of secondary carbonates; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bkg1—18 to 25 inches; light brownish gray (10YR 6/2) silt loam, white (10YR 8/1) dry; massive; slightly hard, very friable, slightly sticky and slightly plastic; common medium roots and few fine and very fine roots; few medium, fine, and very fine tubular pores; violently effervescent; 60 percent calcium carbonate equivalent; 30 percent fine nodules of secondary carbonates; moderately alkaline (pH 8.4); clear smooth boundary.

Bkg2—25 to 47 inches; light gray (10YR 7/2) silt loam, very pale brown (10YR 8/2) dry; massive; slightly hard, very friable, slightly sticky and slightly plastic; few medium to very fine roots; many coarse and common medium to very fine tubular pores; violently effervescent; 50 percent calcium carbonate equivalent; 15 percent medium nodules of secondary carbonates; moderately alkaline (pH 8.4); clear wavy boundary.

Cg—47 to 63 inches; grayish brown (10YR 5/2) silt loam, light gray (10YR 7/2) dry; massive; slightly hard, very friable, slightly sticky and slightly plastic; common coarse and medium and few fine and very fine roots; common coarse and medium and few fine and very fine tubular pores; violently effervescent; 20 percent calcium carbonate equivalent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—12 to 20 inches
Depth to seasonal high water table—12 to 18 inches in October through June

Particle-size control section (average):
Clay content—15 to 18 percent

Akg horizon:
Hue—10YR or 2.5Y
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist
Calcium carbonate equivalent—20 to 40 percent

Bkg horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 7 moist
Chroma—1 or 2 dry or moist
Calcium carbonate equivalent—40 to 65 percent

Cg horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 7 moist
Chroma—1 or 2 dry or moist

Lanoak Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and hills
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 0 to 30 percent
Elevation: 5,100 to 6,000 feet
Mean annual precipitation: 15 to 17 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-silty, mixed, frigid Pachic Haploxerolls

Typical Pedon

Lanoak silt loam in an area of Rexburg-Lanoak complex, 4 to 12 percent slopes; about 7 miles west and 12 miles north of Malad City, in Oneida County, Idaho; about 600 feet north and 500 feet east of the southwest corner of sec. 20, T. 12 S., R. 35 E.

Ap—0 to 10 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and slightly plastic; few fine and very fine roots; few fine and many very fine irregular pores; slightly acid (pH 6.4); clear smooth boundary.

BA—10 to 30 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; few fine and many very fine tubular pores; neutral (pH 6.8); clear smooth boundary.

Bt1—30 to 35 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine roots; few fine and many very fine tubular pores; 15 percent faint clay films on faces of peds; neutral (pH 6.8); clear smooth boundary.

Bt2—35 to 49 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine roots; few fine and many very fine tubular pores; 15 percent faint clay films on faces of peds; neutral (pH 7.0); abrupt smooth boundary.

Bk—49 to 60 inches; light gray (10YR 7/2) silt loam, brown (10YR 4/3) moist; massive; hard, very friable, nonsticky and nonplastic; few very fine roots; many very fine irregular pores; violently effervescent; secondary carbonates finely disseminated in matrix; slightly alkaline (pH 7.7).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 35 inches
Depth to secondary carbonates—45 to 60 inches

Particle-size control section (average):
Clay content—18 to 27 percent

Ap and BA horizons:
Value—3 to 5 dry, 1 to 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—5 or 6 dry, 2 to 4 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—0 to 15 percent

Lizdale Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately rapid
Landform: Mountains and hills
Parent material: Kind—alluvium; source—limestone, tuffaceous limestone, and sandstone
Slope range: 6 to 70 percent
Elevation: 4,800 to 6,400 feet
Mean annual precipitation: 14 to 20 inches
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Typic Calcixerolls

Typical Pedon

Lizdale very gravelly silt loam in an area of Ridgecrest-Hondoho-Lizdale association, 30 to 60 percent slopes (fig. 12); about 2 miles south and 3 miles east of Malad City, in Oneida County, Idaho; about 2,200 feet south and 600 feet east of the northwest corner of sec. 36, T. 14 S., R. 36 E.

A—0 to 7 inches; dark grayish brown (10YR 4/2) very gravelly silt loam, dark brown (10YR 3/3) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine and fine and few medium and coarse roots; common very fine and fine irregular and tubular pores; 35 percent gravel and 5 percent cobbles; slightly effervescent; 8 percent calcium carbonate equivalent; slightly alkaline (pH 7.6); clear wavy boundary.

Figure 12.— Profile of Lizdale very gravelly silt loam in an area of Ridgecrest-Hondoho-Lizdale association, 30 to 60 percent slopes.

Bk1—7 to 10 inches; brown (10YR 5/3) very gravelly loam, brown (10YR 4/3) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine and fine irregular and tubular pores; 40 percent gravel and 5 percent cobbles; strongly effervescent; 30 percent calcium carbonate equivalent; coatings of secondary carbonates on rock fragments; slightly alkaline (pH 7.6); clear wavy boundary.

Bk2—10 to 20 inches; pink (7.5YR 7/4) very gravelly sandy loam, light brown (7.5YR 6/4) moist; single grain; loose, nonsticky and nonplastic; few very fine to coarse roots; many fine irregular pores; 50 percent gravel and 5 percent cobbles; violently effervescent; 40 percent calcium carbonate equivalent; masses and threads of secondary carbonates in matrix and coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.0); clear smooth boundary.

Bk3—20 to 36 inches; pink (7.5YR 7/4) very gravelly sandy loam, light brown (7.5YR 6/4) moist; single grain; loose, nonsticky and nonplastic; few very fine to coarse roots; many fine irregular pores; 50 percent gravel and 5 percent cobbles; violently effervescent; 45 percent calcium carbonate equivalent; masses and threads of secondary carbonates in matrix and coatings of secondary carbonates on rock fragments; slightly alkaline (pH 7.6); abrupt smooth boundary.

C1—36 to 52 inches; light brown (7.5YR 6/4) extremely gravelly sandy loam, strong brown (7.5YR 4/6) moist; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; many fine irregular pores; 80 percent gravel and 5 percent cobbles; strongly effervescent; 30 percent calcium carbonate equivalent; few coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.0); clear smooth boundary.

C2—52 to 60 inches; light brown (7.5YR 6/4) extremely gravelly loamy sand, strong brown (7.5YR 4/6) moist; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; many fine irregular pores; 65 percent gravel and 5 percent cobbles; strongly effervescent; 25 percent calcium carbonate equivalent; few coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 15 inches
Depth to calcic horizon—7 to 15 inches

Particle-size control section (average):
Clay content—10 to 18 percent
Rock fragment content—35 to 75 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR or 7.5YR
Value—5 to 8 dry, 4 to 7 moist
Chroma—2 to 4 dry or moist
Texture—very gravelly loam or very gravelly sandy loam
Calcium carbonate equivalent—25 to 60 percent

C horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 to 6 dry or moist
Texture—extremely gravelly sandy loam or extremely gravelly loamy sand

Logan Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Poorly drained
Permeability: Moderately slow
Landform: Lake terraces and flood plains
Parent material: Kind—alluvium and lacustrine deposits; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,700 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 47 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Fine-silty, mesic Typic Calciaquolls

Typical Pedon

Logan silt loam in an area of Brinnum-Logan-Langless complex, 0 to 2 percent slopes; about 1 mile southeast of Samaria, in Oneida County, Idaho; about 900 feet south and 2,400 feet east of the northwest corner of sec. 24, T. 15 S., R. 35 E.; colors in this pedon description are for moist soil unless otherwise noted.

Oi—0 to 4 inches; slightly decomposed plant material consisting of grass and sedges.

A—4 to 22 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; weak coarse subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; many very fine to medium roots; many very fine and fine tubular pores; slightly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bkg1—22 to 44 inches; dark gray (N 4/0) silt loam, gray (N 6/0) dry; massive; very hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; common fine and medium tubular pores; common fine distinct dark yellowish brown (10YR 4/6) masses of iron accumulation; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bkg2—44 to 59 inches; dark gray (N 4/0) silt loam, gray (N 6/0) dry; massive; very hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine to medium tubular pores; common fine distinct dark yellowish brown (10YR 4/4) masses of iron accumulation; violently effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Cg—59 to 64 inches; gray (N 5/0) silt loam, light gray (N 7/0) dry; massive; very hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine to medium tubular pores; common fine distinct yellowish brown (10YR 5/6) masses of iron accumulation; strongly effervescent; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 19 inches
Depth to calcic horizon—10 to 25 inches
Depth to seasonal high water table—at the surface to a depth of 18 inches below the surface in March through July

Particle-size control section (average):
Clay content—20 to 25 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bkg horizon:
Hue—2.5Y or 5Y, or neutral
Value—6 or 7 dry, 4 or 5 moist
Chroma—0 or 1 dry or moist
Calcium carbonate equivalent—5 to 35 percent

Cg horizon:
Hue—2.5Y or 5Y, or neutral
Value—6 to 8 dry, 4 to 7 moist
Chroma—0 or 1 dry or moist

Other Features

The Logan soils in this survey area average slightly less than 25 percent clay in the particle-size control section. This difference, however, does not affect the use and management of the soils.

Lonigan Series

Depth class: Moderately deep to bedrock (paralithic)

Drainage class: Well drained
Permeability: Moderately rapid
Landform: Mountains
Parent material: Kind—residuum; source—tuff
Slope range: 6 to 50 percent
Elevation: 4,800 to 6,200 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 95 days

Taxonomic class: Ashy-skeletal, frigid Vitrandic Haploxerolls

Typical Pedon

Lonigan very fine sandy loam in an area of Copenhagen-Lonigan-Manila association, 12 to 50 percent slopes; about 7 miles southeast of Malad City, in Oneida County, Idaho; about 1,000 feet west and 2,000 feet north of the southeast corner of sec. 15, T. 15 S., R. 37 E.

A1—0 to 4 inches; grayish brown (10YR 5/2) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium and coarse roots; few very fine tubular pores; 10 percent gravel; slightly alkaline (pH 7.8); clear wavy boundary.

A2—4 to 11 inches; grayish brown (10YR 5/2) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, nonsticky and nonplastic; many very fine and fine and few medium roots; few very fine tubular pores; 10 percent gravel and 2 percent cobbles; slightly alkaline (pH 7.8); clear wavy boundary.

Bw—11 to 16 inches; light brownish gray (10YR 6/2) very gravelly loam, dark grayish brown (10YR 4/2) and grayish brown (2.5Y 5/2) moist; moderate medium subangular blocky structure parting to moderate fine granular; soft, very friable, nonsticky and nonplastic; many very fine and fine and few coarse roots; common very fine tubular pores; 40 percent gravel and 3 percent cobbles; moderately alkaline (pH 8.0); clear wavy boundary.

Bk1—16 to 20 inches; very pale brown (10YR 8/2) very gravelly loam, light gray (2.5Y 7/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine to medium roots; many very fine and few fine tubular pores; 35 percent gravel and 15 percent cobbles; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bk2—20 to 33 inches; white (10YR 8/1) very gravelly loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and few fine tubular pores; 35 percent gravel and 20 percent cobbles; violently effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Cr—33 inches; weathered tuff.

Range in Characteristics

Profile:
Thickness of mollic epipedon—8 to 15 inches
Depth to secondary carbonates—6 to 18 inches
Depth to bedrock—20 to 40 inches

Particle-size control section (average):
Clay content—10 to 18 percent
Rock fragment content—35 to 60 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Hue—10YR or 2.5Y
Value—3 to 7 dry, 2 to 6 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly loam or very gravelly silt loam

Bk horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 7 moist
Chroma—1 to 4 dry or moist
Texture—very gravelly loam or very gravelly silt loam
Calcium carbonate equivalent—15 to 35 percent

Lostine Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants
Parent material: Kind—alluvium and loess; source—mixed
Slope range: 12 to 30 percent
Elevation: 5,300 to 5,800 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Pachic Haploxerolls

Typical Pedon

Lostine silt loam in an area of Cedarhill-Lostine complex, 12 to 30 percent slopes; about 10 miles north and 1 mile east of Holbrook, in Oneida County, Idaho; about 700 feet west and 500 feet north of the southeast corner of sec. 7, T. 13 S., R. 33 E.

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine and fine tubular pores; 2 to 3 percent fine gravel; neutral (pH 7.0); clear wavy boundary.

Bw1—7 to 23 inches; dark grayish brown (10YR 4/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine tubular pores; neutral (pH 7.1); clear wavy boundary.

Bw2—23 to 30 inches; brown (10YR 4/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine tubular pores; neutral (pH 7.3); clear wavy boundary.

Bw3—30 to 45 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine and few medium tubular pores; slightly alkaline (pH 7.4); clear wavy boundary.

C—45 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine tubular pores; slightly alkaline (pH 7.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—30 to 45 inches

Particle-size control section (average):
Clay content—10 to 18 percent

Ap horizon:
Value—3 or 4 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bw horizon:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

C horizon:
Value—4 to 6 dry or moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silty clay loam

Manila Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Slow
Landform: Fan remnants, hills, and mountains
Parent material: Kind—alluvium and colluvium; source—mixed
Slope range: 4 to 50 percent
Elevation: 4,900 to 6,500 feet
Mean annual precipitation: 16 to 19 inches
Mean annual air temperature: 42 to 43 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Fine, montmorillonitic, frigid Typic Argixerolls

Typical Pedon

Manila silt loam in an area of Manila-Yago complex, 4 to 12 percent slopes; about 10 miles west of Malad City, in Oneida County, Idaho; about 1,000 feet east and 350 feet north of the southwest corner of sec. 27, T. 14 S., R. 34 E.

Ap—0 to 5 inches; brown (10YR 4/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; 5 percent gravel; neutral (pH 7.2); clear smooth boundary.

BA—5 to 15 inches; brown (10YR 5/3) silty clay loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; slightly alkaline (pH 7.4); clear wavy boundary.

Bt1—15 to 19 inches; brown (7.5YR 5/2) silty clay loam, brown (7.5YR 4/4) moist; moderate fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine and fine roots; 15 percent faint clay films on faces of peds and lining pores; 5 percent gravel; slightly alkaline (pH 7.4); clear wavy boundary.

Bt2—19 to 36 inches; brown (7.5YR 5/2) silty clay, dark yellowish brown (10YR 4/4) moist; strong medium subangular blocky structure; very hard, very firm, very sticky and very plastic; few very fine and fine roots; 70 percent prominent clay films on faces of peds; 5 percent gravel; slightly alkaline (pH 7.6); clear wavy boundary.

Bt3—36 to 45 inches; light brown (7.5YR 6/4) silty clay, brown (7.5YR 5/4) moist; strong medium subangular blocky structure; hard, firm, very sticky and very plastic; few very fine roots; 70 percent prominent clay films on faces of peds; 5 percent gravel; slightly alkaline (pH 7.8); clear smooth boundary.

2Bk—45 to 60 inches; pink (7.5YR 8/4) silt loam, light brown (7.5YR 6/4) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; 5 percent gravel; violently effervescent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 20 inches
Depth to secondary carbonates—45 to 60 inches or more

Particle-size control section (average):
Clay content—35 to 50 percent
Rock fragment content—0 to 5 percent

A and BA horizons:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Hue—7.5YR or 10YR
Value—4 to 6 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist
Texture—clay, silty clay loam, or silty clay

2Bk horizon:
Value—6 to 8 dry, 4 to 6 moist
Chroma—3 or 4 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—10 to 25 percent

McCarey Series

Depth class: Moderately deep to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Undulating lava plains
Parent material: Kind—loess, alluvium, and residuum; source—basalt
Slope range: 4 to 40 percent
Elevation: 5,200 to 6,200 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-loamy, mixed, frigid Calcic Argixerolls

Typical Pedon

McCarey silt loam in an area of Hutchley-McCarey-Araveton complex, 4 to 40 percent slopes; about 1 mile north and 3 miles west of Holbrook, in Oneida County, Idaho; about 2,400 feet east and 2,700 feet south of the northwest corner of sec. 28, T. 14 S., R. 32 E.

A—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine irregular pores and few fine tubular pores; 10 percent gravel; neutral (pH 7.3); clear wavy boundary.

Bt—8 to 15 inches; grayish brown (10YR 5/2) silt loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; few very fine to coarse roots; common very fine and few fine tubular pores; 10 percent stones; slightly alkaline (pH 7.4); many distinct clay films that are dark yellowish brown (10YR 3/4) moist and are on faces of peds and lining pores; clear wavy boundary.

Btk—15 to 19 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; few very fine to coarse roots; common very fine tubular pores; 40 percent faint clay films on faces of peds and lining pores; 5 percent cobbles and 8 percent stones; strongly effervescent; carbonate coatings on rock fragments; slightly alkaline (pH 7.8); clear wavy boundary.

Bk—19 to 23 inches; very pale brown (10YR 8/3) cobbly silt loam, light yellowish brown (10YR 6/4) moist; weak very fine and fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine to coarse roots; few very fine tubular pores; 5 percent gravel, 15 percent cobbles, and 10 percent stones; violently effervescent; carbonate coatings on rock fragments; moderately alkaline (pH 8.0); clear wavy boundary.

R—23 inches; slightly weathered basalt.

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 20 inches
Depth to secondary carbonates—15 to 25 inches
Depth to bedrock—20 to 40 inches

Particle-size control section (average):
Clay content—23 to 27 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt and Btk horizons:
Value—5 or 6 dry, 3 to 5 moist
Chroma—2 to 4 dry or moist

Bk horizon:
Value—7 or 8 dry, 5 or 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—5 to 25 percent

Mellor Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Slow

Landform: Lake terraces
Parent material: Kind—alluvium and lacustrine deposits; source—sedimentary rock
Slope range: 0 to 2 percent
Elevation: 4,400 to 4,600 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 110 days

Taxonomic class: Fine-silty, mixed, mesic Xeric Natrargids

Typical Pedon

Mellor silt loam in an area of Mellor-Freedom complex, 0 to 2 percent slopes; about 500 feet north of the Utah State line and 4 miles west of Interstate Highway 84, in Oneida County, Idaho; about 500 feet east and 500 feet north of the southwest corner of sec. 27, T. 16 S., R. 30 E.

E—0 to 4 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate very thick platy structure parting to weak thin platy; soft, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine vesicular pores; slightly effervescent; strongly alkaline (pH 8.5); abrupt smooth boundary.
Btn1—4 to 8 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 5/3) moist; moderate very coarse prismatic structure parting to strong fine and medium subangular blocky; hard, friable, moderately sticky and moderately plastic; few fine and common very fine roots; many very fine tubular pores; many faint clay films on faces of peds; strongly effervescent; 16 percent exchangeable sodium; strongly alkaline (pH 8.7); clear wavy boundary.
Btn2—8 to 16 inches; light gray (10YR 7/2) silty clay loam, pale brown (10YR 6/3) moist; moderate fine and medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine roots; common very fine tubular pores; 40 percent faint clay films on faces of peds; strongly effervescent; 16 percent exchangeable sodium; strongly alkaline (pH 8.9); clear wavy boundary.
Bk1—16 to 27 inches; light gray (10YR 7/2) silt loam, pale brown (10YR 6/3) moist; moderate fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.
Bk2—27 to 44 inches; light gray (2.5Y 7/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; very hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; few fine prominent strong brown (7.5YR 5/8) relict masses of iron accumulation; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.
C—44 to 60 inches; light gray (2.5Y 7/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; hard, firm, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; common fine prominent strong brown (7.5YR 5/8) relict masses of iron accumulation; strongly effervescent; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Thickness of ochric epipedon—4 to 9 inches

Particle-size control section (average):
Clay content—27 to 35 percent

E horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 to 4 dry or moist

Btn horizon:
Value—5 to 7 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Sodium adsorption ratio—15 to 25

Bk horizon:
Hue—7.5YR to 2.5Y
Value—5 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—15 to 25 percent

C horizon:
Value—6 to 8 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist

Neeley Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces and fan remnants
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 0 to 4 percent
Elevation: 4,800 to 5,100 feet
Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Coarse-silty, mixed, mesic Calcidic Haploxerolls

Typical Pedon

Neeley silt loam, 0 to 4 percent slopes; about 1 mile north and 1 mile east of the junction of Interstate Highway 80 and Blackpine Valley Road, in Oneida County, Idaho; about 100 feet north and 200 feet west of the southeast corner of sec. 10, T. 15 S., R. 30 E.

A1—0 to 3 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate medium and thick platy structure parting to weak very fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and few fine, medium, and coarse roots; many very fine irregular pores and common very fine tubular pores; slightly alkaline (pH 7.5); abrupt smooth boundary.

A2—3 to 7 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine to coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine irregular pores and common very fine tubular pores; slightly alkaline (pH 7.5); clear wavy boundary.

Bw—7 to 14 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; common fine and medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and few fine to coarse roots; many very fine irregular pores and common very fine tubular pores; slightly alkaline (pH 7.6); few krotovina nodules; abrupt wavy boundary.

Bk1—14 to 20 inches; light gray (10YR 7/2) silt loam, pale brown (10YR 6/3) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine to coarse roots; few fine irregular pores and common very fine tubular pores; violently effervescent; many very hard, firm carbonate nodules; moderately alkaline (pH 8.1); clear wavy boundary.

Bk2—20 to 26 inches; pale yellow (2.5Y 8/2) silt loam, light brownish gray (2.5Y 6/2) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few fine roots; common very fine and few fine tubular pores; violently effervescent; common very hard carbonate nodules that slake in water and in concentrated hydrochloric acid; strongly alkaline (pH 8.6); clear wavy boundary.

C1—26 to 50 inches; light gray (2.5Y 7/2) silt loam, light brownish gray (2.5Y 6/2) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine roots; common very fine and few fine tubular pores; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

C2—50 to 65 inches; light gray (2.5Y 7/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; few fine roots; common very fine and few fine tubular pores; strongly effervescent; strongly alkaline (pH 8.9).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 12 inches
Depth to calcic horizon—10 to 24 inches

Particle-size control section (average):
Clay content—10 to 18 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 5 to 7 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—15 to 30 percent

C horizon:
Value—7 or 8 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist

Northwater Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains
Parent material: Kind—colluvium and residuum; source—sandstone and other sedimentary rock
Slope range: 20 to 60 percent

Elevation: 5,600 to 7,700 feet
Mean annual precipitation: 20 to 25 inches
Mean annual air temperature: 39 to 42 degrees F
Frost-free period: 40 to 70 days

Taxonomic class: Loamy-skeletal, mixed Cryic Pachic Paleborolls

Typical Pedon

Northwater gravelly silt loam in an area of Hymas-Northwater-Clayburn association, 20 to 60 percent slopes; about 4 miles south of Samaria, in Oneida County, Idaho; about 550 feet east and 200 feet north of the southwest corner of sec. 12, T. 16 S., R. 35 E.; colors in this pedon description are for moist soil unless otherwise noted.

Oi—0 to 2 inches; slightly decomposed plant material consisting of Douglas fir needles and twigs.

A1—2 to 16 inches; very dark brown (10YR 2/2) gravelly silt loam, dark grayish brown (10YR 4/2) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse and few fine roots; few very fine tubular and irregular pores; 25 percent gravel; neutral (pH 7.3); abrupt wavy boundary.

A2—16 to 20 inches; dark brown (7.5YR 3/2) gravelly silt loam, grayish brown (10YR 5/2) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, medium, and coarse and few fine roots; few very fine tubular pores and common very fine irregular pores; 25 percent gravel; neutral (pH 7.3); abrupt wavy boundary.

A3—20 to 31 inches; very dark brown (10YR 2/2) very gravelly silt loam, dark grayish brown (10YR 4/2) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, medium, and coarse and few fine roots; few very fine tubular pores and common very fine irregular pores; 45 percent gravel and 10 percent cobbles; neutral (pH 7.3); clear wavy boundary.

Bt1—31 to 37 inches; brown (7.5YR 4/4) very gravelly loam, light yellowish brown (10YR 6/4) dry; weak very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine, medium, and coarse and few fine roots; common very fine tubular pores; 15 percent faint clay films on faces of peds; 45 percent gravel and 5 percent cobbles; neutral (pH 7.2); abrupt wavy boundary.

Bt2—37 to 62 inches; brown (7.5YR 4/4) very gravelly clay loam, light yellowish brown (10YR 6/4) dry; moderate very fine subangular blocky structure; hard, firm, slightly sticky and slightly plastic; few very fine roots; common very fine tubular and irregular pores; 40 percent distinct clay films on faces of peds and lining pores; 35 percent gravel and 15 percent cobbles; neutral (pH 7.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 35 inches
Depth to argillic horizon—24 inches or more

Particle-size control section (average):
Clay content—18 to 32 percent
Rock fragment content—35 to 50 percent

A horizon:
Hue—10YR or 7.5YR
Value—4 or 5 dry, 2 or 3 moist

Chroma—2 or 3 dry or moist
Texture—gravelly silt loam, very gravelly silt loam, or very gravelly loam

Bt horizon:
Hue—10YR or 7.5YR
Value—5 to 7 dry, 4 or 5 moist
Chroma—3 or 4 dry or moist
Texture—very gravelly loam or very gravelly clay loam

Obnot Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Very slow
Landform: Hills and fan remnants
Parent material: Kind—alluvium; source—quartzite
Slope range: 4 to 12 percent
Elevation: 5,000 to 6,000 feet
Mean annual precipitation: 15 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Typic Haploxererts

Typical Pedon

Obnot cobbly silty clay loam in an area of Manila-Obnot complex, 4 to 12 percent slopes (fig. 13); about 6 miles north of Malad City, in Oneida County, Idaho; about 500 feet east and 100 feet south of the northwest corner of sec. 19, T. 13 S., R. 37 E.

Figure 13.— Typical area of Obnot cobbly silty clay loam in an area of Manila-Obnot complex, 4 to 12 percent slopes, in foreground. Yago-Manila, 20 to 40 percent slopes, is in middle. Oxford Mountain is in background.

A1—0 to 5 inches; dark grayish brown (10YR 4/2) cobbly silty clay loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure; soft, friable, moderately sticky and moderately plastic; few very fine and fine roots; many very fine and fine tubular pores; cracks 1.5 to 3.0 centimeters wide; 10 percent cobbles and 5 percent stones; slightly acid (pH 6.2); clear smooth boundary.

A2—5 to 12 inches; dark grayish brown (10YR 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to weak medium and fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few very fine and fine roots; many very fine and fine tubular pores; cracks 1.5 to 3.0 centimeters wide; 5 percent cobbles; neutral (pH 6.6); clear wavy boundary.

AB—12 to 19 inches; brown (7.5YR 5/4) silty clay, dark brown (7.5YR 3/4) moist; moderate medium subangular blocky structure parting to weak fine angular blocky; very hard, very firm, very sticky and very plastic; few very fine roots; common very fine and fine tubular pores; cracks 1.5 to 3.0 centimeters wide; 5 percent gravel; slightly acid (pH 6.2); clear smooth boundary.

Bss1—19 to 24 inches; brown (7.5YR 5/4) silty clay, brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure parting to moderate fine angular blocky; extremely hard, very firm, very sticky and very plastic; few very fine roots; few very fine tubular pores; cracks 1.5 to 3.0 centimeters wide; 15 percent intersecting slickensides; neutral (pH 7.2); clear smooth boundary.

Bss2—24 to 31 inches; light brown (7.5YR 6/4) silty clay, brown (7.5YR 4/4) moist; weak coarse angular blocky structure parting to moderate medium platy; extremely hard, extremely firm, very sticky and very plastic; few very fine roots; few very fine tubular pores; cracks 1.5 to 3.0 centimeters wide; common intersecting slickensides; few wedge-shaped aggregates; 5 percent gravel; neutral (pH 7.0); clear smooth boundary.

Bk1—31 to 34 inches; light brown (7.5YR 6/4) clay loam, brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure; extremely hard, extremely firm, very sticky and very plastic; few very fine tubular pores; 5 percent gravel; slightly effervescent; slightly alkaline (pH 7.6); clear smooth boundary.

Bk2—34 to 60 inches; pink (7.5YR 7/4) cobbly clay loam, brown (7.5YR 5/4) moist; massive; extremely hard, extremely firm, very sticky and very plastic; common very fine tubular pores; 10 percent cobbles and 5 percent stones; strongly effervescent; slightly alkaline (pH 7.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—12 to 23 inches
Depth to secondary carbonates—30 to 39 inches

Particle-size control section (average):
Clay content—40 to 55 percent
Rock fragment content—0 to 10 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 to 4 dry or moist (where chroma of 3 or more is present in the upper 12 inches, it accounts for less than 50 percent of the horizon color)

AB and Bss horizons:
Hue—10YR or 7.5YR
Value—5 or 6 dry, 4 or 5 moist

Chroma—3 or 4 dry or moist
Texture—silty clay or clay loam

Bk horizon:
Hue—10YR or 7.5YR
Value—6 or 7 dry, 4 or 5 moist
Chroma—3 or 4 dry or moist
Texture—cobbly clay loam or clay loam
Calcium carbonate equivalent—5 to 15 percent

Parehat Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Somewhat poorly drained
Permeability: Moderate
Landform: Low stream terraces
Parent material: Kind—alluvium influenced by loess; source—mixed
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,500 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 100 to 115 days

Taxonomic class: Fine-silty, mixed, mesic Fluvaquentic Haploxerolls

Typical Pedon

Parehat silt loam, 0 to 2 percent slopes; about 3 miles south of Malad City, in Oneida County, Idaho; about 2,500 feet north and 200 feet east of the southwest corner of sec. 3, T. 15 S., R. 36 E.

A—0 to 6 inches; grayish brown (10YR 5/2) silt loam, black (10YR 2/1) moist; moderate fine subangular blocky structure parting to moderate medium granular; soft, friable, nonsticky and nonplastic; many very fine and fine roots; few medium and common very fine and fine tubular pores; slightly effervescent; slightly alkaline (pH 7.6); abrupt smooth boundary.

AB—6 to 11 inches; brown (10YR 5/3) silt loam, very dark gray (10YR 3/1) moist; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; few medium and many very fine tubular pores; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bw—11 to 21 inches; light brownish gray (2.5Y 6/2) silt loam, very dark grayish brown (2.5Y 3/2) moist; weak medium platy structure parting to weak medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; common fine prominent reddish yellow (7.5YR 7/6) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Ab—21 to 28 inches; grayish brown (10YR 5/2) silt loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure parting to weak medium prismatic; hard, friable, moderately sticky and moderately plastic; few very fine roots; few medium and many very fine and fine tubular pores; slightly effervescent; slightly alkaline (pH 7.8); clear smooth boundary.

Bk1—28 to 33 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) moist; massive; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine and fine tubular pores; 10 percent gravel; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

Bk2—33 to 42 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; 10 percent gravel; strongly effervescent; few carbonate masses in matrix; moderately alkaline (pH 8.0); clear smooth boundary.

C1—42 to 52 inches; light brownish gray (2.5Y 6/2) silt loam, grayish brown (2.5Y 5/2) moist; massive; hard, friable, moderately sticky and moderately plastic; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C2—52 to 64 inches; light brownish gray (2.5Y 6/2) loam, grayish brown (2.5Y 5/2) moist; massive; hard, friable, moderately sticky and moderately plastic; many medium prominent olive yellow (5Y 6/6) masses of iron accumulation and few fine prominent strong brown (7.5YR 5/6) masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 19 inches
Depth to seasonal high water table—24 to 36 inches in April through July

Particle-size control section (average):
Clay content—19 to 26 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist

Bk and C1 horizons:
Value—5 to 7 dry, 3 to 5 moist
Chroma—1 or 2 dry or moist
Calcium carbonate equivalent—10 to 15 percent

C2 horizon:
Value—5 to 7 dry, 3 to 5 moist
Chroma—1 or 2 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—10 to 15 percent

Other Features

The Parehat soils in this survey area do not have a calcic horizon, which is outside the range for the official series. This difference, however, does not affect the use and management of the soils.

Parleys Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 0 to 12 percent
Elevation: 4,400 to 5,200 feet
Mean annual precipitation: 14 to 15 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-silty, mixed, mesic Calcic Argixerolls

Typical Pedon

Parleys silt loam, 0 to 2 percent slopes; about 1 mile north of Woodruff, in Oneida County, Idaho; about 50 feet south and 1,400 feet east of the northwest corner of sec. 15, T. 16 S., R. 36 E.

Ap—0 to 5 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium platy structure parting to moderate fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; neutral (pH 7.2); clear smooth boundary.

Bt1—5 to 10 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine and fine roots; 40 percent faint clay films on faces of peds and lining pores; neutral (pH 7.2); abrupt wavy boundary.

Bt2—10 to 19 inches; grayish brown (10YR 5/2) silty clay loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine and few fine roots; 40 percent prominent clay films on faces of peds and lining pores; neutral (pH 7.2); clear wavy boundary.

Bt3—19 to 26 inches; brown (10YR 5/3) silty clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine and fine roots; 40 percent distinct clay films on faces of peds and lining pores; slightly effervescent; slightly alkaline (pH 7.8); abrupt wavy boundary.

Bk1—26 to 38 inches; white (10YR 8/1) silt loam, light brownish gray (2.5Y 6/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and medium prominent strong brown (7.5YR 4/6) relict masses of iron accumulation; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2—38 to 58 inches; light gray (5Y 7/1) silt loam, grayish brown (10YR 5/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few fine prominent strong brown (7.5YR 5/6) relict masses of iron accumulation; strongly effervescent; many fine and medium irregular threads of secondary carbonates; moderately alkaline (pH 8.4); clear wavy boundary.

Bk3—58 to 64 inches; light gray (2.5Y 7/2) silt loam, light olive brown (2.5Y 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many medium prominent strong brown (7.5YR 5/6) relict masses of iron accumulation; strongly effervescent; many fine and medium irregular threads of secondary carbonates; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 20 inches
Depth to secondary carbonates—18 to 32 inches

Particle-size control section (average):
Clay content—27 to 35 percent

Ap horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Hue—10YR to 5Y
Value—6 to 8 dry, 5 or 6 moist
Chroma—1 to 4 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—15 to 40 percent

Pavohroo Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Mountains
Parent material: Kind—alluvium, colluvium, and loess; source—sedimentary rock
Slope range: 10 to 70 percent
Elevation: 5,000 to 7,700 feet
Mean annual precipitation: 20 to 25 inches
Mean annual air temperature: 39 to 42 degrees F
Frost-free period: 40 to 65 days

Taxonomic class: Fine-loamy, mixed Pachic Cryoborolls

Typical Pedon

Pavohroo gravelly silt loam in an area of Pavohroo-Povey association, 30 to 60 percent slopes; about 14 miles west and 4 miles north of Malad City, in Oneida County, Idaho; about 1,000 feet north of the southeast corner of sec. 31, T. 13 S., R. 34 E.; colors in this pedon description are for moist soil unless otherwise noted.

Oi—0 to 1 inch; slightly decomposed plant material consisting of leaves, twigs, grass, and roots.

A1—1 to 7 inches; very dark brown (10YR 2/2) gravelly silt loam, dark brown (10YR 3/3) dry; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine and fine and common medium and coarse roots; 15 percent gravel; neutral (pH 7.0); clear smooth boundary.

A2—7 to 16 inches; very dark grayish brown (10YR 3/2) silt loam, brown (10YR 4/3) dry; moderate fine and medium subangular blocky structure parting to weak fine granular; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium and few coarse roots; 10 percent gravel; neutral (pH 7.0); clear smooth boundary.

Bw1—16 to 26 inches; dark brown (10YR 3/3) gravelly silt loam, brown (10YR 5/3) dry; moderate medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; common fine and medium and few very fine roots; 20 percent gravel; neutral (pH 7.0); clear wavy boundary.

Bw2—26 to 39 inches; brown (10YR 4/3) gravelly silt loam, light yellowish brown (10YR 6/4) dry; weak medium subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine to medium roots; 20 percent gravel and 10 percent cobbles; neutral (pH 7.0); gradual wavy boundary.

C—39 to 61 inches; dark yellowish brown (10YR 4/4) gravelly clay loam, light yellowish brown (10YR 6/4) dry; massive; hard, very friable, moderately sticky and moderately plastic; few very fine roots; 30 percent gravel and 4 percent cobbles; neutral (pH 6.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—16 to 45 inches

Particle-size control section (average):
Clay content—19 to 25 percent
Rock fragment content—less than 35 percent

A horizon:
Value—3 or 4 dry, 1 to 3 moist
Chroma—1 or 2 dry or moist

Bw horizon:
Value—3 to 6 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist

C horizon:
Value—5 or 6 dry
Chroma—2 to 4 dry or moist

Pollynot Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Fan remnants and lake terraces
Parent material: Kind—alluvium; source—sedimentary rock
Slope range: 4 to 12 percent
Elevation: 4,300 to 5,000 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-loamy, mixed, mesic Calcic Argixerolls

Typical Pedon

Pollynot silt loam in an area of Samaria-Pollynot complex, 4 to 12 percent slopes; about 2 miles west of Samaria, in Oneida County, Idaho; about 2,770 feet south and 1,020 feet west of the northeast corner of sec. 9, T. 15 S., R. 35 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to moderate fine granular; hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; few fine and very fine tubular pores; 2 percent gravel; slightly alkaline (pH 7.6); clear wavy boundary.

Bt—7 to 17 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and few fine tubular pores; 15 percent faint clay films lining pores; 2 percent gravel; slightly alkaline (pH 7.6); gradual wavy boundary.

Bk1—17 to 33 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine and fine tubular pores; 5 percent gravel; strongly effervescent; few fine irregular threads of secondary carbonates; slightly alkaline (pH 7.8); gradual wavy boundary.

Bk2—33 to 41 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; massive;

hard, friable, slightly sticky and slightly plastic; few very fine and fine tubular pores; 10 percent gravel; strongly effervescent; common fine and medium irregular threads of secondary carbonates in matrix and common fine coatings of secondary carbonates on rock fragments; slightly alkaline (pH 7.8); gradual wavy boundary.

2Bk3—41 to 56 inches; light gray (10YR 7/2) very gravelly sandy loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine tubular pores; 55 percent gravel; strongly effervescent; common fine and medium irregular threads of secondary carbonates in matrix and common fine coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.0); gradual wavy boundary.

2Bk4—56 to 60 inches; light gray (10YR 7/2) extremely gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine tubular pores; 65 percent gravel; strongly effervescent; common fine and medium irregular threads of secondary carbonates in matrix and common fine coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 17 inches
Thickness of argillic horizon—10 to 19 inches

Particle-size control section (average):
Clay content—18 to 26 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist

Bk1 and Bk2 horizons:
Value—6 or 7 dry, 4 or 5 moist
Chroma—3 or 4 dry or moist
Texture—silt loam or loam
Calcium carbonate equivalent—5 to 25 percent

2Bk3 and 2Bk4 horizons:
Value—6 or 7 dry, 4 or 5 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly sandy loam or extremely gravelly loam
Rock fragment content—35 to 70 percent
Calcium carbonate equivalent—15 to 35 percent

Other Features

The Pollynot soils in this survey area are slightly shallower to secondary carbonates than is the official series. Also, the particle-size control section is 18 to 26 percent clay, which is less than that of the official series. These differences, however, do not affect the use and management of the soils.

Povey Series

Depth class: Very deep (greater than 60 inches)

Drainage class: Well drained
Permeability: Moderate
Landform: Mountains
Parent material: Kind—colluvium; source—sandstone and limestone
Slope range: 10 to 70 percent
Elevation: 5,600 to 7,700 feet
Mean annual precipitation: 16 to 24 inches
Mean annual air temperature: 39 to 41 degrees F
Frost-free period: 60 to 70 days

Taxonomic class: Loamy-skeletal, mixed Pachic Cryoborolls

Typical Pedon

Povey gravelly loam in an area of Povey-Pavohroo association, 30 to 60 percent slopes; about 12 miles west and 8 miles north of Holbrook, in Oneida County, Idaho; about 100 feet south and 250 feet east of the northwest corner of sec. 30, T. 13 S., R. 31 E.; colors in this pedon description are for moist soil unless otherwise noted.

A1—0 to 5 inches; very dark grayish brown (10YR 3/2) gravelly loam, dark grayish brown (10YR 4/2) dry; weak fine and very fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine to coarse roots; many very fine and common fine tubular pores; 25 percent gravel and 8 percent cobbles; neutral (pH 7.3); clear smooth boundary.

A2—5 to 12 inches; very dark grayish brown (10YR 3/2) very cobbly loam, grayish brown (10YR 5/2) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine tubular and interstitial pores; 25 percent gravel and 20 percent cobbles; neutral (pH 7.2); gradual wavy boundary.

Bw1—12 to 20 inches; dark brown (10YR 3/3) very cobbly loam, brown (10YR 5/3) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and interstitial pores; 25 percent gravel and 25 percent cobbles; neutral (pH 7.2); clear wavy boundary.

Bw2—20 to 35 inches; dark yellowish brown (10YR 3/4) very gravelly sandy loam, yellowish brown (10YR 5/4) dry; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and interstitial pores; 40 percent gravel and 10 percent cobbles; neutral (pH 7.1); clear wavy boundary.

BC—35 to 60 inches; brown (7.5YR 4/4) extremely gravelly sandy loam, brown (7.5YR 5/4) dry; weak fine subangular blocky structure; soft, very friable, slightly sticky and nonplastic; common very fine and fine roots and few medium and coarse roots; many very fine irregular pores and few very fine interstitial pores; 40 percent gravel and 25 percent cobbles; neutral (pH 7.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—16 to 40 inches

Particle-size control section (average):
Clay content—10 to 18 percent
Rock fragment content—35 to 65 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist

Bw horizon:
Value—3 to 5 dry, 3 or 4 moist
Chroma—3 or 4 dry, 1 to 4 moist
Texture—very cobbly loam, very gravelly sandy loam, extremely gravelly sandy loam, or extremely gravelly loam

BC horizon:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist

Povirt Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Poorly drained
Permeability: Very slow
Landform: Relict lakebeds
Parent material: Kind—lacustrine deposits; source—limestone, quartzite, sandstone, and tuff
Slope range: 0 to 2 percent
Elevation: 4,900 to 5,200 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine, montmorillonitic (calcareous), frigid Vertic Epiaquepts

Typical Pedon

Povirt silty clay loam, 0 to 2 percent slopes; about 14 miles southwest of Malad City, in Oneida County, Idaho; about 1,700 feet south and 600 feet east of the northwest corner of sec. 3, T. 16 S., R. 34 E.; colors in this pedon description are for moist soil unless otherwise noted.

Ap—0 to 10 inches; brown (10YR 5/3) silty clay loam, light brownish gray (10YR 6/2) dry; moderate medium subangular blocky structure; slightly hard, firm, very sticky and very plastic; few very fine roots; common very fine tubular pores; 0.5-inch-wide cracks that extend through the horizon; slightly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

Bg—10 to 20 inches; dark grayish brown (10YR 4/2) silty clay, light brownish gray (10YR 6/2) dry; strong medium and coarse subangular blocky structure; hard, firm, very sticky and very plastic; few fine roots; common very fine tubular pores; 0.5-inch-wide cracks that extend through the horizon; few fine prominent reddish brown (2.5YR 5/4) masses of iron accumulation; slightly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

Bkng1—20 to 27 inches; dark grayish brown (10YR 4/2) silty clay, light brownish gray (10YR 6/2) dry; strong medium prismatic structure; very hard, very firm, very sticky and very plastic; few very fine roots; common very fine tubular pores; 0.3-inch-wide cracks that extend to base of horizon; few fine prominent reddish brown (2.5YR 5/4) masses of iron accumulation; slightly effervescent; few fine masses of secondary carbonates; strongly alkaline (pH 8.6); clear wavy boundary.

Bkng2—27 to 45 inches; grayish brown (10YR 5/2) silty clay, very pale brown (10YR

7/3) dry; strong medium subangular blocky structure; very hard, very firm, very sticky and very plastic; few very fine roots; common very fine tubular pores; few fine prominent red (2.5YR 5/6) masses of iron accumulation; slightly effervescent; common coarse masses of secondary carbonates; strongly alkaline (pH 8.8); clear wavy boundary.

Bkng3—45 to 60 inches; grayish brown (10YR 5/2) silty clay, light gray (10YR 7/1) dry; strong medium and coarse subangular blocky structure; very hard, very firm, very sticky and very plastic; common very fine tubular pores; many fine prominent red (2.5YR 5/6) masses of iron accumulation; slightly effervescent; many coarse masses of secondary carbonates; strongly alkaline (pH 8.8).

Range in Characteristics

Profile:
Soil moisture content—saturated for 1 to 3 months in spring during most years
Description of cracks—0.5 to 1.0 inch wide, 20 to 30 inches deep, and 15 to 40 inches long
Depth of seasonal perched water table—12 inches above the surface to a depth of 18 inches below the surface in April through June

Particle-size control section (average):
Clay content—40 to 60 percent

Ap horizon:
Value—5 to 7 dry, 4 to 6 moist
Chroma—1 to 3 dry or moist

Bg horizon:
Value—6 or 7 dry, 4 or 5 moist
Chroma—1 to 3 dry or moist

Bkng horizon:
Value—6 to 8 dry, 4 or 5 moist
Chroma—1 to 3 dry or moist
Calcium carbonate equivalent—5 to 20 percent
Sodium adsorption ratio—10 to 30

Preston Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Excessively drained
Permeability: Rapid
Landform: Dunes on lake terraces
Parent material: Kind—eolian sand; source—mixed
Slope range: 3 to 12 percent
Elevation: 4,500 to 4,800 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Mixed, mesic Typic Xeropsamments

Typical Pedon

Preston fine sand in an area of Kidman-Preston association, 2 to 12 percent slopes; about 4.5 miles west of Malad City, in Oneida County, Idaho; about 1,850 feet north and 200 feet east of the southwest corner of sec. 14, T. 14 S., R. 35 E.

A—0 to 3 inches; grayish brown (10YR 5/2) fine sand, very dark grayish brown (10YR

3/2) moist; single grain; loose, nonsticky and nonplastic; few fine and very fine roots; many very fine interstitial pores; slightly alkaline (pH 7.4); abrupt smooth boundary.

AC—3 to 17 inches; grayish brown (10YR 5/2) fine sand, very dark grayish brown (10YR 3/2) moist; massive; soft, very friable, nonsticky and nonplastic; many fine and very fine roots; many very fine interstitial pores; slightly alkaline (pH 7.6); clear wavy boundary.

C1—17 to 36 inches; pale brown (10YR 6/3) fine sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; many fine and very fine roots; many very fine interstitial pores; slightly alkaline (pH 7.6); clear wavy boundary.

C2—36 to 65 inches; pale brown (10YR 6/3) fine sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine and very fine roots; many very fine interstitial pores; slightly alkaline (pH 7.8).

Range in Characteristics

Profile:
Depth to calcareous material—40 to 60 inches or more

Particle-size control section (average):
Clay content—0 to 5 percent

A and AC horizons:
Value—4 or 5 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Other features—low chroma in A horizon is result of dark sand grains

C horizon:
Value—5 or 6 dry, 4 or 5 moist
Chroma—3 or 4 dry or moist

Pyrat Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and lake terraces
Parent material: Kind—alluvium and lacustrine deposits; source—limestone and other sedimentary rock
Slope range: 2 to 30 percent
Elevation: 4,400 to 5,000 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Loamy-skeletal, mixed, mesic Durinodic Xeric Haplocalcids

Typical Pedon

Pyrat gravelly silt loam in an area of Darkbull-Pyrat-Ecur complex, 2 to 30 percent slopes; about 6 miles south of Juniper, in Oneida County, Idaho; about 50 feet north and 3,600 feet west of the southeast corner of sec. 6, T. 16 S., R. 30 E.

A—0 to 9 inches; pale brown (10YR 6/3) gravelly silt loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many fine and very fine roots; common very fine tubular pores; 15 percent gravel; strongly effervescent; 1-millimeter-thick coatings of secondary carbonates on underside of rock fragments; 7 percent calcium carbonate equivalent; strongly alkaline (pH 8.6); gradual smooth boundary.

Bk1—9 to 14 inches; pale brown (10YR 6/3) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; strong fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine tubular pores; 20 percent gravel; violently effervescent; 2-millimeter-thick coatings of secondary carbonates on underside of rock fragments; 8 percent calcium carbonate equivalent; strongly alkaline (pH 8.6); clear smooth boundary.

Bk2—14 to 20 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; few very fine tubular pores; 45 percent gravel; violently effervescent; 2-millimeter-thick coatings of secondary carbonates on underside of rock fragments; 10 percent calcium carbonate equivalent; strongly alkaline (pH 8.7); clear smooth boundary.

Bk3—20 to 25 inches; very pale brown (10YR 7/3) very gravelly sandy loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; few fine tubular pores; 55 percent gravel; violently effervescent; 2-millimeter-thick coatings of secondary carbonates on underside of rock fragments; 15 percent calcium carbonate equivalent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bkq—25 to 33 inches; light gray (10YR 7/2) extremely gravelly sandy loam, pale brown (10YR 6/3) moist; massive; very hard, very firm and brittle, nonsticky and nonplastic; few very fine roots; few fine tubular pores; 75 percent gravel; violently effervescent; 2-millimeter-thick coatings of secondary carbonates on rock fragments; discontinuous weak cementation with secondary silica and carbonates in matrix; 25 percent calcium carbonate equivalent; strongly alkaline (pH 8.8); clear smooth boundary.

Ck1—33 to 43 inches; very pale brown (10YR 7/3) extremely gravelly sandy loam, pale brown (10YR 6/3) moist; massive; hard, friable, nonsticky and nonplastic; few very fine roots; many fine tubular pores; 70 percent gravel and 10 percent cobbles; violently effervescent; 1-millimeter-thick coatings of secondary carbonates on rock fragments; 30 percent calcium carbonate equivalent; strongly alkaline (pH 8.9); clear smooth boundary.

Ck2—43 to 65 inches; very pale brown (10YR 7/3) extremely gravelly loamy sand, pale brown (10YR 6/3) moist; single grain; loose, nonsticky and nonplastic; few very fine roots; many fine irregular pores; 75 percent gravel and 5 percent cobbles; strongly effervescent; 1-millimeter-thick coatings of secondary carbonates on rock fragments; 30 percent calcium carbonate equivalent; strongly alkaline (pH 9.0).

Range in Characteristics

Profile:
Depth to discontinuous, weakly cemented material—22 to 32 inches

Particle-size control section (average):
Clay content—5 to 18 percent
Rock fragment content—35 to 80 percent

A and Bk1 horizons:
Value—6 or 7 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—5 to 10 percent

Bk2 and Bk3 horizons:
Value—6 or 7 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist

Calcium carbonate equivalent—10 to 30 percent

Bkq horizon:
Value—6 or 7 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly sandy loam or extremely gravelly sandy loam
Calcium carbonate equivalent—10 to 30 percent

Ck horizon:
Value—6 or 7 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly sandy loam, extremely gravelly sandy loam, or extremely gravelly loamy sand
Calcium carbonate equivalent—10 to 30 percent

Raldridge Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Hills
Parent material: Kind—loess and alluvium; source—mixed and basalt
Slope range: 4 to 12 percent
Elevation: 4,600 to 5,100 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 120 to 130 days

Taxonomic class: Fine-loamy, mixed, mesic Calcic Pachic Argixerolls

Typical Pedon

Raldridge gravelly loam, 4 to 12 percent slopes; about 1 mile south of Samaria, in Oneida County, Idaho; about 300 feet east and 2,350 feet north of the southwest corner of sec. 25, T. 15 S., R. 35 E.

A—0 to 3 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark brown (10YR 2/2) moist; weak very thin and thin platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots and few medium roots; common very fine irregular pores and many very fine and fine tubular pores; 20 percent gravel; slightly alkaline (pH 7.4); clear wavy boundary.
Bt1—3 to 7 inches; dark grayish brown (10YR 4/2) gravelly silty clay loam, very dark grayish brown (10YR 3/2) moist; weak very fine and fine subangular blocky structure; hard, very friable, moderately sticky and moderately plastic; many very fine, common fine, and few medium roots; common very fine tubular pores; 40 percent faint clay films on faces of peds; 20 percent gravel; slightly alkaline (pH 7.6); clear wavy boundary.
Bt2—7 to 14 inches; dark grayish brown (10YR 4/2) gravelly silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate very fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and fine and few medium roots; common very fine and fine tubular pores; 40 percent distinct clay films on faces of peds and lining pores; 15 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.8); clear wavy boundary.
Bt3—14 to 22 inches; grayish brown (10YR 5/2) very gravelly clay loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and fine roots and few medium roots; common very fine tubular pores; 15 percent faint clay films on

faces of peds and lining pores; 40 percent gravel and 5 percent cobbles; moderately alkaline (pH 8.0); abrupt wavy boundary.

Bk1—22 to 35 inches; light gray (10YR 7/2) very gravelly loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; 50 percent gravel and 5 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.0); gradual wavy boundary.

Bk2—35 to 60 inches; very pale brown (10YR 8/2) very gravelly loam, light yellowish brown (10YR 6/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine tubular pores; 50 percent gravel and 5 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.2).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 25 inches
Depth to secondary carbonates—22 to 36 inches

Particle-size control section (average):
Clay content—27 to 35 percent
Rock fragment content—20 to 30 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist
Texture—gravelly silty clay loam or very gravelly clay loam

Bk horizon:
Value—6 to 8 dry, 3 to 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—15 to 25 percent

Rexburg Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and hills
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 1 to 30 percent
Elevation: 5,100 to 5,900 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Calcic Haploxerolls

Typical Pedon

Rexburg silt loam in an area of Ririe-Rexburg complex, 4 to 12 percent slopes; about 8 miles north and 5 miles west of Holbrook, in Oneida County, Idaho; about 1,300 feet west and 100 feet north of the southeast corner of sec. 18, T. 13 S., R. 32 E.

Ap—0 to 11 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; many very fine irregular pores; slightly alkaline (pH 7.4); abrupt smooth boundary.

AB—11 to 14 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to moderate fine granular; slightly hard, very friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular and irregular pores; slightly alkaline (pH 7.4); clear smooth boundary.

Bw—14 to 22 inches; brown (10YR 5/3) silt loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and few fine tubular pores; slightly alkaline (pH 7.6); clear wavy boundary.

Bk—22 to 39 inches; light gray (10YR 7/2) silt loam, light yellowish brown (10YR 6/4) moist; weak fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; strongly effervescent; common fine and medium threads and masses of secondary carbonates; moderately alkaline (pH 8.0); clear wavy boundary.

C—39 to 60 inches; very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine tubular pores; strongly effervescent; slightly alkaline (pH 7.8).

Range in Characteristics

Profile:
Thickness of mollic epipedon—12 to 15 inches
Depth to secondary carbonates—18 to 35 inches

Particle-size control section (average):
Clay content—12 to 18 percent

Ap and AB horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bk and C horizons:
Value—6 or 7 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Texture—silt loam or silt
Calcium carbonate equivalent—15 to 30 percent

Ridgecrest Taxadjunct

Depth class: Moderately deep to bedrock (lithic)
Drainage class: Well drained
Permeability: Moderate
Landform: Mountains
Parent material: Kind—colluvium; source—limestone
Slope range: 12 to 70 percent
Elevation: 5,200 to 7,000 feet
Mean annual precipitation: 14 to 18 inches

Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Typic Calcixerolls

Typical Pedon

Ridgecrest very gravelly silt loam in an area of Ridgecrest-Hondoho complex, 30 to 60 percent slopes; about 12 miles west and 11 miles north of Malad City, in Oneida County, Idaho; about 2,560 feet east and 1,250 feet north of the southwest corner of sec. 29, T. 12 S., R. 34 E.

A—0 to 4 inches; grayish brown (10YR 5/2) very gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine to coarse roots; few very fine tubular pores and many very fine irregular pores; 35 percent gravel and 10 percent cobbles; slightly effervescent; slightly alkaline (pH 7.5); abrupt wavy boundary.

Bk1—4 to 9 inches; grayish brown (10YR 5/2) very gravelly silt loam, very dark grayish brown (10YR 3/2) moist; weak very fine and fine subangular blocky structure parting to very fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine and fine tubular pores and common very fine irregular pores; 30 percent gravel and 10 percent cobbles; slightly effervescent; few coatings of secondary carbonates on underside of rock fragments; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bk2—9 to 13 inches; grayish brown (10YR 5/2) very cobbly silt loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure parting to weak very fine and fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine to coarse roots; common very fine tubular and irregular pores; 15 percent gravel and 40 percent cobbles; slightly effervescent; few coatings of secondary carbonates on underside of rock fragments; 20 percent calcium carbonate equivalent; slightly alkaline (pH 7.8); clear wavy boundary.

Bk3—13 to 21 inches; yellowish brown (10YR 5/4) very cobbly loam, brown (10YR 4/3) moist; weak very fine to medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and coarse and few fine and medium roots; common very fine tubular pores and few very fine irregular pores; 15 percent gravel and 40 percent cobbles; slightly effervescent; common coatings of secondary carbonates on rock fragments; 25 percent calcium carbonate equivalent; moderately alkaline (pH 7.9); gradual wavy boundary.

Bk4—21 to 31 inches; light yellowish brown (10YR 6/4) very cobbly loam, brown (10YR 5/3) moist; weak very fine and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine to coarse roots; few very fine tubular pores and many very fine irregular pores; 15 percent gravel and 40 percent cobbles; strongly effervescent; common coatings of secondary carbonates on rock fragments; 45 percent calcium carbonate equivalent; moderately alkaline (pH 8.2); abrupt irregular boundary.

Bk5—31 to 35 inches; very pale brown (10YR 8/3) extremely cobbly sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine irregular pores; 20 percent gravel and 65 percent cobbles; violently effervescent; many coatings of secondary carbonates on rock fragments; 60 percent calcium carbonate equivalent; moderately alkaline (pH 8.3); abrupt irregular boundary.

R—35 inches; highly fractured limestone.

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 16 inches
Depth to secondary carbonates—0 to 4 inches
Depth to bedrock—20 to 40 inches

Particle-size control section (average):
Clay content—12 to 17 percent
Coarse fragment content—55 to 85 percent
Calcium carbonate equivalent—25 to 70 percent; 40 to 85 percent in less than 20-millimeter fraction

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—5 to 8 dry, 3 to 6 moist
Chroma—2 to 4 dry or moist
Texture—very cobbly loam, very cobbly silt loam, very gravelly silt loam, or extremely cobbly sandy loam
Calcium carbonate equivalent—15 to 70 percent

Taxadjunct Feature

The Ridgecrest soils in this survey area have a calcic horizon, which is outside the range for the official series. This difference, however, does not affect the use and management of the soils.

Ririe Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Hills and fan remnants
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 2 to 30 percent
Elevation: 5,000 to 5,800 feet
Mean annual precipitation: 12 to 17 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 70 to 100 days

Taxonomic class: Coarse-silty, mixed, frigid Calcic Haploxerolls

Typical Pedon

Ririe silt loam in an area of Ririe-Rexburg complex, 4 to 12 percent slopes; about 3.5 miles west of Holbrook, in Oneida County, Idaho; about 1,400 feet west and 800 feet south of the northeast corner of sec. 33, T. 14 S., R. 32 E.

A—0 to 6 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak thin to thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine tubular pores and many very fine irregular pores; 2 percent gravel; slightly alkaline (pH 7.4); abrupt smooth boundary.

AB—6 to 14 inches; brown (10YR 5/3) silt loam, dark brown (10YR 3/3) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine tubular and irregular pores; few cicada krotovinas; 2 percent gravel; slightly alkaline (pH 7.5); abrupt wavy boundary.

Bk1—14 to 31 inches; very pale brown (10YR 7/3) silt loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, slightly sticky and slightly plastic; common very fine roots and few fine and medium roots; common very fine tubular pores; 15 to 20 percent cicada krotovinas; 2 percent gravel; strongly effervescent; coatings of secondary carbonates on krotovinas; moderately alkaline (pH 8.3); clear wavy boundary.

Bk2—31 to 46 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine to medium roots; common very fine tubular pores and few very fine interstitial pores; few cicada krotovinas; 2 percent gravel; strongly effervescent; coatings of secondary carbonates on krotovinas; moderately alkaline (pH 8.0); gradual wavy boundary.

Bk3—46 to 63 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and few fine tubular pores; 2 percent gravel; strongly effervescent; coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.1).

Range in Characteristics

Profile:
Thickness of mollic epipedon—8 to 15 inches
Depth to secondary carbonates—7 to 16 inches

Particle-size control section (average):
Clay content—12 to 18 percent

A and AB horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—1 to 4 dry or moist
Calcium carbonate equivalent—15 to 35 percent

Samaria Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces and fan remnants
Parent material: Kind—lacustrine deposits and alluvium; source—mixed
Slope range: 0 to 12 percent
Elevation: 4,500 to 5,300 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Fine-loamy, mixed, mesic Typic Calcixerolls

Typical Pedon

Samaria silt loam in an area of Samaria-Sterling complex, 4 to 12 percent slopes;

about 11 miles south of Malad City, in Oneida County, Idaho; about 2,500 feet east and 1,250 feet north of the southwest corner of sec. 11, T. 16 S., R. 36 E.

A—0 to 5 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium platy structure parting to weak very fine and fine granular; soft, very friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine and fine tubular pores; 10 percent gravel; slightly effervescent; slightly alkaline (pH 7.8); abrupt smooth boundary.

Bk1—5 to 16 inches; brown (10YR 5/3) gravelly silt loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine and fine tubular pores; 15 percent gravel; slightly effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.1); abrupt wavy boundary.

Bk2—16 to 19 inches; light brownish gray (10YR 6/2) gravelly loam, dark grayish brown (10YR 4/2) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine and fine tubular pores; 20 percent gravel; strongly effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.1); abrupt wavy boundary.

Bk3—19 to 27 inches; very pale brown (10YR 8/2) gravelly loam, light brownish gray (10YR 6/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium and few coarse roots; common very fine and fine tubular pores; 25 percent gravel; violently effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.2); clear wavy boundary.

Bk4—27 to 51 inches; light gray (10YR 7/2) gravelly sandy loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine to coarse roots; common fine tubular pores; 30 percent gravel and 2 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bk5—51 to 64 inches; very pale brown (10YR 7/3) gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine to medium roots; few very fine tubular pores; 15 percent gravel and 5 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—15 to 18 inches
Depth to calcic horizon—5 to 17 inches

Particle-size control section (average):
Clay content—18 to 20 percent
Rock fragment content—15 to 35 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—5 to 8 dry, 3 to 6 moist
Chroma—2 or 3 dry or moist

Texture—gravelly silt loam, gravelly loam, or gravelly sandy loam
Calcium carbonate equivalent—10 to 40 percent

Sterling Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and hills
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 25 percent
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 49 degrees F
Frost-free period: 100 to 120 days

Taxonomic class: Loamy-skeletal, mixed, mesic Typic Calcixerolls

Typical Pedon

Sterling very gravelly loam, 12 to 20 percent slopes; about 7 miles south and 4 miles east of Malad City, in Oneida County, Idaho; about 1,625 feet north and 1,625 feet west of the southeast corner of sec. 25, T. 16 S., R. 36 E.

A1—0 to 5 inches; brown (10YR 5/3) very gravelly loam, very dark grayish brown (10YR 3/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; 40 percent gravel, 15 percent cobbles, and 1 percent stones; slightly effervescent; slightly alkaline (pH 7.7); abrupt smooth boundary.

A2—5 to 13 inches; brown (10YR 5/3) very gravelly loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; 40 percent gravel and 15 percent cobbles; slightly effervescent; slightly alkaline (pH 7.7); clear wavy boundary.

Bk1—13 to 22 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; 35 percent gravel, 10 percent cobbles, and 1 percent stones; strongly effervescent; slightly alkaline (pH 7.8); clear wavy boundary.

Bk2—22 to 55 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine and medium roots; 40 percent gravel and 10 percent cobbles; strongly effervescent; common coatings of secondary carbonates on rock fragments and common fine irregular threads of secondary carbonates; moderately alkaline (pH 7.9); clear wavy boundary.

Bk3—55 to 66 inches; very pale brown (10YR 7/3) very gravelly loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; 35 percent gravel and 5 percent cobbles; violently effervescent; common coatings of secondary carbonates on rock fragments and many fine irregular threads of secondary carbonates; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 18 inches
Depth to calcic horizon—7 to 17 inches

Particle-size control section (average):
Clay content—10 to 22 percent
Rock fragment content—35 to 70 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—5 to 7 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Texture—very gravelly loam or extremely gravelly loam
Calcium carbonate equivalent—10 to 40 percent

Stines Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately rapid
Landform: Mountains
Parent material: Kind—alluvium and residuum; source—rhyolitic tuff
Slope range: 10 to 40 percent
Elevation: 6,300 to 6,700 feet
Mean annual precipitation: 16 to 18 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 70 to 80 days

Taxonomic class: Ashy-skeletal, frigid Vitrandic Haploxerolls

Typical Pedon

Stines gravelly loam in an area of Pavohroo-Stines-Lonigan association, 10 to 40 percent slopes; about 2 miles north of Dairy Creek, in Oneida County, Idaho; about 850 feet north and 3,000 feet west of the southeast corner of sec. 16, T. 11 S., R. 35 E.

A—0 to 13 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; 25 percent gravel and 5 percent cobbles; slightly alkaline (pH 7.5); clear wavy boundary.

Bw—13 to 24 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 5/3) moist; moderate fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine to medium roots; 35 percent gravel and 15 percent cobbles; slightly alkaline (pH 7.6); clear wavy boundary.

Bk—24 to 44 inches; light gray (10YR 7/2) very gravelly sandy loam, light brownish gray (10YR 6/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine and fine roots; 35 percent gravel, 15 percent cobbles, and 5 percent stones; strongly effervescent; few masses of secondary carbonates in matrix and few medium coatings of secondary carbonates on rock fragments; moderately alkaline (pH 8.0); clear wavy boundary.

C—44 to 60 inches; light gray (10YR 7/2) extremely cobbly loamy sand, light brownish gray (10YR 6/2) moist; single grain; loose, nonsticky and nonplastic; few very fine roots; 30 percent gravel, 40 percent cobbles, and 10 percent stones; slightly effervescent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 15 inches
Depth to secondary carbonates—5 to 24 inches

Particle-size control section (average):
Clay content—7 to 15 percent
Rock fragment content—35 to 55 percent
Volcanic glass content—more than 60 percent

A horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 3 to 5 moist
Chroma—2 or 3 dry or moist
Texture—very gravelly loam, very gravelly sandy loam, or very cobbly loam

Bk horizon:
Value—6 or 7 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist
Calcium carbonate equivalent—10 to 20 percent

C horizon:
Value—6 or 7 dry or moist
Chroma—2 or 3 dry or moist

Other Features

The Stines soils in this survey area have a mollic epipedon that is slightly thinner than is typical for the official series. Also, the depth to secondary carbonates in these soils is slightly less than is typical for the official series. These differences, however, do not affect the use and management of the soils.

Thatcher Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Fan remnants
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 30 percent
Elevation: 4,700 to 5,900 feet
Mean annual precipitation: 13 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Fine-silty, mixed, frigid Calcic Argixerolls

Typical Pedon

Thatcher silt loam, 4 to 12 percent slopes; about 3 miles west and 6 miles north of Malad City, in Oneida County, Idaho; about 1,800 feet west and 500 feet north of the southeast corner of sec. 30, T. 13 S., R. 36 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine irregular pores; neutral (pH 7.3); abrupt smooth boundary.

Bt1—7 to 16 inches; yellowish brown (10YR 5/4) silty clay loam, dark brown (10YR 3/3) moist; moderate medium angular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine roots; many very fine tubular pores; 40 percent distinct clay films on faces of peds and lining pores; slightly alkaline (pH 7.5); gradual smooth boundary.

Bt2—16 to 35 inches; light yellowish brown (10YR 6/4) silty clay loam, brown (10YR 4/3) moist; moderate medium and coarse prismatic structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; 40 percent distinct clay films on faces of peds and lining pores; slightly alkaline (pH 7.6); gradual wavy boundary.

Bk1—35 to 45 inches; light yellowish brown (10YR 6/4) silt loam, dark yellowish brown (10YR 4/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, moderately sticky and moderately plastic; few very fine roots; many very fine tubular pores; strongly effervescent; slightly alkaline (pH 7.8); common fine masses of secondary carbonates; gradual wavy boundary.

Bk2—45 to 60 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine tubular pores; violently effervescent; common fine masses of secondary carbonates; 20 percent calcium carbonate equivalent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 16 inches
Depth to calcic horizon—25 to 40 inches

Particle-size control section (average):
Clay content—28 to 35 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—3 or 4 dry or moist
Texture—silty clay loam or clay loam

Bk horizon:
Value—6 or 7 dry, 4 to 6 moist
Chroma—3 or 4 dry or moist
Texture—silt loam, fine sandy loam, or loam
Calcium carbonate equivalent—15 to 25 percent

Tickason Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants
Parent material: Kind—alluvium; source—sedimentary rock
Slope range: 0 to 4 percent
Elevation: 4,400 to 5,000 feet

Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 130 days

Taxonomic class: Coarse-loamy, mixed, mesic Calcidic Haploxerolls

Typical Pedon

Tickason very fine sandy loam, 0 to 2 percent slopes; about 5 miles south of Holbrook, in Oneida County, Idaho; about 2,200 feet east and 1,300 feet north of the southwest corner of sec. 7, T. 15 S., R. 33 E.

Ap—0 to 10 inches; grayish brown (10YR 5/2) very fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; few very fine to coarse roots; slightly alkaline (pH 7.4); clear wavy boundary.

Bw1—10 to 18 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 3/3) moist; weak medium and moderate fine subangular blocky structure; hard, very friable, slightly sticky and nonplastic; few very fine to coarse roots; slightly alkaline (pH 7.6); clear wavy boundary.

Bw2—18 to 23 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; weak fine prismatic structure parting to moderate medium subangular blocky; hard, very friable, slightly sticky and slightly plastic; few very fine to coarse roots; slightly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—23 to 31 inches; very pale brown (10YR 8/3) very fine sandy loam, pale brown (10YR 6/3) moist; weak medium subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine to coarse roots; strongly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bk2—31 to 38 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 5/3) moist; massive; hard, friable, nonsticky and nonplastic; few very fine to coarse roots; strongly effervescent; 20 to 25 percent secondary carbonate nodules; slightly alkaline (pH 7.8); abrupt wavy boundary.

Bk3—38 to 60 inches; very pale brown (10YR 7/3) loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few prominent black (10YR 2/1) masses of manganese accumulation and organic stains; violently effervescent; many medium and coarse irregular threads and masses of secondary carbonates; 15 to 25 percent carbonate nodules; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 13 inches
Depth to calcic horizon—12 to 23 inches

Particle-size control section (average):
Clay content—10 to 18 percent

Ap horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bw and Bk1 horizons:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist
Texture—fine sandy loam, very fine sandy loam, or loam
Calcium carbonate equivalent—15 to 25 percent

Bk2 and Bk3 horizons:
Value—7 or 8 dry, 5 or 6 moist

Chroma—2 to 4 dry or moist
Texture—loam or fine sandy loam
Calcium carbonate equivalent—15 to 25 percent

Tirod Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Fan remnants and lake terraces
Parent material: Kind—alluvium and lacustrine deposits; source—quartzite
Slope range: 0 to 2 percent
Elevation: 4,300 to 5,000 feet
Mean annual precipitation: 12 to 14 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 130 days

Taxonomic class: Fine-loamy, mixed, mesic Calcic Argixerolls

Typical Pedon

Tirod silt loam, 0 to 2 percent slopes; about 0.75 mile north of Malad City, in Oneida County, Idaho; about 1,300 feet south and 30 feet east of the northwest corner of sec. 16, T. 14 S., R. 36 E.

Ap—0 to 9 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; 5 percent gravel; neutral (pH 7.1); abrupt smooth boundary.

A—9 to 18 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium and coarse roots; 10 percent gravel; neutral (pH 7.2); abrupt wavy boundary.

Bt1—18 to 30 inches; light brownish gray (10YR 6/2) loam, dark brown (10YR 3/3) moist; moderate medium and coarse angular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine and few fine and medium roots; 40 percent distinct clay films on faces of peds and lining pores; 10 percent gravel; neutral (pH 7.1); clear wavy boundary.

Bt2—30 to 40 inches; pale brown (10YR 6/3) clay loam, brown (10YR 4/3) moist; weak medium prismatic structure parting to moderate medium and coarse angular blocky; hard, firm, moderately sticky and moderately plastic; common very fine and few fine and medium roots; 70 percent distinct clay films on faces of peds and lining pores; 10 percent gravel; neutral (pH 7.1); abrupt wavy boundary.

Bk—40 to 62 inches; very pale brown (10YR 8/2) loam, light yellowish brown (2.5Y 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine to medium roots; 10 percent gravel; strongly effervescent; common medium coatings of secondary carbonates on rock fragments; common fine and medium irregular threads of secondary carbonates; moderately alkaline (pH 7.9).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 19 inches
Thickness of argillic horizon—19 to 30 inches
Depth to calcic horizon—35 to 43 inches

Particle-size control section (average):
Clay content—20 to 27 percent
Rock fragment content—5 to 10 percent

Ap and A horizons:
Hue—10YR or 7.5YR
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Hue—10YR or 7.5YR
Value—4 to 6 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist
Texture—loam or clay loam

Bk horizon:
Hue—10YR or 2.5Y
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 to 4 dry or moist
Calcium carbonate equivalent—15 to 25 percent

Toefoot Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Stream terraces and toeslopes
Parent material: Kind—alluvium; source—mixed
Slope range: 0 to 4 percent
Elevation: 5,000 to 5,400 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 80 to 100 days

Taxonomic class: Coarse-loamy, mixed, frigid Cumulic Haploxerolls

Typical Pedon

Toefoot silt loam, 0 to 4 percent slopes; about 8 miles west and 13 miles north of Malad City, in Oneida County, Idaho; about 900 feet west and 1,200 feet south of the northeast corner of sec. 18, T. 12 S., R. 35 E.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, black (10YR 2/1) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common fine and few medium tubular pores; 8 percent gravel; neutral (pH 7.3); abrupt smooth boundary.

A—6 to 11 inches; grayish brown (10YR 5/2) silt loam, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure parting to moderate medium granular; slightly hard, very friable, slightly sticky and slightly plastic; few very fine to medium roots; few fine tubular pores; slightly alkaline (pH 7.4); abrupt smooth boundary.

Bw—11 to 14 inches; grayish brown (10YR 5/2) silt loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine to medium roots; few fine tubular pores; slightly effervescent; slightly alkaline (pH 7.5); abrupt smooth boundary.

Akb—14 to 26 inches; grayish brown (10YR 5/2) silt loam, very dark gray (10YR 3/1) moist; weak medium granular structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and few fine and medium roots; few fine and medium tubular pores; 4 percent gravel; strongly effervescent; many fine masses and threads of secondary carbonates; moderately alkaline (pH 7.9); clear wavy boundary.

Bk1—26 to 33 inches; light brownish gray (10YR 6/2) gravelly loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; few fine and medium tubular pores; 15 percent gravel; strongly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

Bk2—33 to 40 inches; light brownish gray (10YR 6/2) very gravelly sandy loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; few fine and medium tubular pores; 40 percent gravel; strongly effervescent; common medium coatings of secondary carbonates on underside of rock fragments; moderately alkaline (pH 8.0); abrupt wavy boundary.

2Bk3—40 to 50 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine and medium roots; few fine and medium tubular pores; 8 percent gravel; slightly effervescent; common fine threads of secondary carbonates; few fine silica-coated pockets of volcanic ash throughout; moderately alkaline (pH 8.0); clear smooth boundary.

2C—50 to 62 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 3/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine and fine roots; few fine tubular pores; slightly effervescent; moderately alkaline (pH 8.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—20 to 31 inches
Depth to secondary carbonates—7 to 11 inches

Particle-size control section (average):
Clay content—13 to 17 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bw horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 to 3 dry or moist

Akb horizon:
Value—4 or 5 dry, 2 or 3 moist
Chroma—1 or 2 dry or moist

Bk and 2Bk horizons:
Value—5 or 6 dry, 3 or 4 moist
Chroma—1 to 3 dry or moist
Texture—gravelly loam, very gravelly sandy loam, or silt loam
Calcium carbonate equivalent—10 to 20 percent

2C horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 to 4 dry or moist

Watercanyon Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants and hills
Parent material: Kind—loess and alluvium; source—mixed
Slope range: 4 to 30 percent
Elevation: 5,000 to 5,900 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 115 days

Taxonomic class: Coarse-silty, mixed, frigid Calcixerollic Xerochrepts

Typical Pedon

Watercanyon silt loam in an area of Ririe-Watercanyon complex, 4 to 12 percent slopes; about 3 miles north of Daniels Reservoir, in Oneida County, Idaho; about 1,000 feet west and 1,600 feet north of the southeast corner of sec. 14, T. 12 S., R. 34 E.

Ap—0 to 5 inches; pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; weak fine granular structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine and fine roots; slightly alkaline (pH 7.4); clear smooth boundary.

Bw—5 to 11 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; weak fine and medium subangular blocky structure; very hard, very friable, slightly sticky and nonplastic; few fine and very fine roots; strongly effervescent; about 3 percent hard, cemented cicada krotovinas that have coatings of secondary carbonates; moderately alkaline (pH 7.9); gradual smooth boundary.

Bk1—11 to 13 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; massive; very hard, very friable, slightly sticky and nonplastic; few very fine roots; strongly effervescent; moderately alkaline (pH 8.0); 15 to 20 percent nodules that are extremely hard and have coatings of secondary carbonates; few coatings of secondary carbonates on faces of peds; clear smooth boundary.

Bk2—13 to 33 inches; very pale brown (10YR 8/3) silt loam, pale brown (10YR 6/3) moist; massive; very hard, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

Bk3—33 to 51 inches; very pale brown (10YR 7/3) very fine sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Bkq—51 to 62 inches; very pale brown (10YR 7/3) very fine sandy loam, brown (10YR 5/3) moist; massive; extremely hard, friable, nonsticky and nonplastic; discontinuous, very weak cementation with secondary carbonates and silica; slightly effervescent; strongly alkaline (pH 8.6).

Range in Characteristics

Profile:
Depth to secondary carbonates—4 to 17 inches

Particle-size control section (average):
Clay content—8 to 16 percent

Ap horizon:
Value—5 or 6 dry, 3 or 4 moist
Chroma—2 or 3 dry or moist

Bw horizon:
Value—5 or 6 dry, 4 or 5 moist
Chroma—3 or 4 dry or moist

Bk horizon:
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Texture—silt loam, very fine sandy loam, or silt
Calcium carbonate equivalent—15 to 35 percent

Other Features

The Watercanyon soils in this survey area are more calcareous closer to the surface than is typical for the official series. This difference, however, does not affect the use and management of the soils.

Welby Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—limestone and sandstone
Slope range: 0 to 12 percent
Elevation: 4,700 to 5,000 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 110 to 130 days

Taxonomic class: Coarse-silty, mixed, mesic Typic Calcixerolls

Typical Pedon

Welby silt loam in an area of Welby-Parleys complex, 0 to 2 percent slopes; about 0.5 mile north of Holbrook, in Oneida County, Idaho; about 1,600 feet east and 250 feet north of the southwest corner of sec. 30, T. 14 S., R. 33 E.

Ap—0 to 5 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; strong thin platy structure; hard, very friable, slightly sticky and slightly plastic; many very fine and few fine roots; common fine tubular pores; slightly effervescent; moderately alkaline (pH 7.9); clear smooth boundary.

A—5 to 11 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; strong coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few fine roots; common fine tubular pores; slightly effervescent; moderately alkaline (pH 7.9); gradual smooth boundary.

Bk1—11 to 19 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; weak fine granular structure; hard, friable, slightly sticky and slightly plastic; common fine roots; few fine tubular pores; violently effervescent; strongly alkaline (pH 9.0); clear smooth boundary.

Bk2—19 to 26 inches; very pale brown (10YR 8/2) silt loam, pale brown (10YR 6/3) moist; moderate fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few fine roots; few fine tubular pores; strongly effervescent; strongly alkaline (pH 9.0); gradual smooth boundary.

Bk3—26 to 36 inches; very pale brown (10YR 8/2) silt loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few fine roots; few fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); gradual smooth boundary.

Bk4—36 to 60 inches; very pale brown (10YR 8/2) fine sandy loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline (pH 8.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—7 to 19 inches

Particle-size control section (average):
Clay content—10 to 18 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 to 8 dry, 4 to 6 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or loam with fine sandy loam at a depth of more than 36 inches
Calcium carbonate equivalent—10 to 35 percent

Wheelon Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderately slow
Landform: Lake terraces
Parent material: Kind—lacustrine deposits; source—mixed
Slope range: 4 to 12 percent
Elevation: 4,900 to 5,200 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 120 days

Taxonomic class: Fine-silty, mixed, mesic Calcixerollic Xerochrepts

Typical Pedon

Wheelon silt loam in an area of Parleys-Wheelon complex, 4 to 12 percent slopes; about 4 miles north and 2 miles west of Malad City, in Oneida County, Idaho; about 2,500 feet east and 1,850 feet north of the southwest corner of sec. 36, T. 13 S., R. 35 E.

Ap—0 to 8 inches; pale brown (10YR 6/3) silt loam, dark grayish brown (10YR 4/2) moist; moderate medium and coarse subangular blocky structure; slightly hard, very friable, moderately sticky and moderately plastic; many very fine and common fine roots; many very fine tubular pores; 2 percent gravel; strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bw—8 to 14 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; weak fine subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine tubular pores; 1 percent gravel; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1—14 to 20 inches; very pale brown (10YR 7/3) silt loam, pale brown (10YR 6/3) moist; weak fine subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine tubular pores; 2 percent gravel; strongly effervescent; common fine irregular masses and threads of secondary carbonates; strongly alkaline (pH 8.6); gradual wavy boundary.

Bk2—20 to 30 inches; very pale brown (10YR 7/3) silty clay loam, brown (10YR 5/3) moist; massive; slightly hard, friable, moderately sticky and moderately plastic; few very fine roots; common very fine tubular pores; common fine prominent yellowish red (5YR 5/8) relict masses of iron accumulation; 1 percent gravel; strongly effervescent; common fine irregular masses and threads of secondary carbonates; strongly alkaline (pH 8.7); gradual wavy boundary.

C1—30 to 45 inches; very pale brown (10YR 7/3) silty clay loam, brown (10YR 5/3) moist; massive; slightly hard, friable, moderately sticky and moderately plastic; common very fine tubular pores; common fine prominent yellowish brown (10YR 5/6) relict masses of iron accumulation; strongly effervescent; strongly alkaline (pH 8.5); gradual wavy boundary.

C2—45 to 60 inches; very pale brown (10YR 7/3) silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine tubular pores; common fine prominent yellowish brown (10YR 5/6) relict masses of iron accumulation; strongly effervescent; strongly alkaline (pH 8.5).

Range in Characteristics

Profile:
Depth to secondary carbonates—8 to 16 inches

Particle-size control section (average):
Clay content—18 to 30 percent

Ap horizon:
Value—6 or 7 dry, 3 to 5 moist
Chroma—1 to 3 dry or moist

Bw horizon:
Value—6 or 7 dry
Chroma—2 or 3 dry or moist
Texture—silt loam or silty clay loam

Bk and C horizons:
Value—7 or 8 dry, 5 or 6 moist
Chroma—2 or 3 dry or moist
Texture—silt loam or silty clay loam
Calcium carbonate equivalent—10 to 35 percent

Other Features

The Wheelon soils in this survey area have a weakly developed Bw horizon, which is outside the range for the official series. This difference, however, does not affect the use and management of the soils.

Wursten Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Landform: Fan remnants
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 15 percent
Elevation: 5,300 to 5,700 feet
Mean annual precipitation: 12 to 16 inches

Mean annual air temperature: 42 to 46 degrees F
Frost-free period: 75 to 100 days

Taxonomic class: Coarse-loamy, mixed, frigid Typic Calcixerolls

Typical Pedon

Wursten gravelly silt loam, 4 to 15 percent slopes; about 15 miles north and 3 miles east of Holbrook, in Oneida County, Idaho; about 1,050 feet east and 900 feet north of the southwest corner of sec. 16, T. 12 S., R. 33 E.

Ap—0 to 7 inches; grayish brown (10YR 5/2) gravelly silt loam, very dark grayish brown (10YR 3/2) moist; moderate thin and medium platy structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; 20 percent gravel; slightly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

A—7 to 16 inches; grayish brown (10YR 5/2) gravelly silt loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and fine roots; many very fine and fine and few medium tubular pores; 25 percent gravel; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1—16 to 28 inches; very pale brown (10YR 8/3) gravelly loam, pale brown (10YR 6/3) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine and few fine tubular pores; 30 percent gravel; violently effervescent; strongly alkaline (pH 9.0); gradual wavy boundary.

Bk2—28 to 38 inches; very pale brown (10YR 8/3) gravelly loam, very pale brown (10YR 7/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; common very fine and fine tubular pores; 20 percent gravel; violently effervescent; strongly alkaline (pH 9.0); clear wavy boundary.

Bk3—38 to 56 inches; very pale brown (10YR 8/3) gravelly loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; common very fine and fine tubular pores; 15 percent gravel; violently effervescent; strongly alkaline (pH 9.0); gradual wavy boundary.

Bk4—56 to 60 inches; very pale brown (10YR 8/3) gravelly loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; 15 percent gravel; violently effervescent; strongly alkaline (pH 9.0).

Range in Characteristics

Profile:
Thickness of mollic epipedon—8 to 18 inches
Depth to calcic horizon—8 to 18 inches

Particle-size control section (average):
Clay content—13 to 18 percent
Rock fragment content—15 to 35 percent

Ap and A horizons:
Value—4 or 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bk horizon:
Value—6 to 8 dry, 5 to 7 moist
Chroma—3 or 4 dry or moist
Texture—gravelly loam or gravelly silt loam
Calcium carbonate equivalent—10 to 30 percent

Yago Series

Depth class: Very deep (greater than 60 inches)
Drainage class: Well drained
Permeability: Slow
Landform: Fan remnants
Parent material: Kind—alluvium; source—mixed
Slope range: 4 to 40 percent
Elevation: 5,600 to 6,500 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 42 to 44 degrees F
Frost-free period: 70 to 80 days

Taxonomic class: Clayey-skeletal, montmorillonitic, frigid Typic Argixerolls

Typical Pedon

Yago very stony silty clay loam in an area of Yago-Manila complex, 20 to 40 percent slopes; about 11 miles west of Malad City, in Oneida County, Idaho; about 700 feet north and 1,600 feet east of the southwest corner of sec. 27, T. 14 S., R. 34 E.; 3 percent stones on soil surface.

A—0 to 10 inches; dark brown (10YR 3/3) very stony silty clay loam, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure parting to weak very fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine to coarse roots; many very fine irregular pores and common very fine tubular pores; 15 percent gravel, 10 percent cobbles, and 10 percent stones; neutral (pH 7.3); abrupt wavy boundary.

Bt1—10 to 30 inches; strong brown (7.5YR 5/6) very cobbly clay loam, brown (7.5YR 4/4) moist; strong fine and medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine and medium and few fine and coarse roots; many very fine tubular pores; 70 percent prominent clay films on faces of peds and lining pores; 20 percent gravel and 35 percent cobbles; neutral (pH 7.1); clear wavy boundary.

Bt2—30 to 40 inches; reddish yellow (7.5YR 6/6) very cobbly clay loam, strong brown (7.5YR 5/6) moist; strong fine and medium angular blocky structure; hard, firm, very sticky and very plastic; few very fine and fine roots; common very fine and few fine tubular pores; 50 percent distinct clay films on faces of peds and lining pores; 15 percent gravel and 30 percent cobbles; neutral (pH 7.2); clear wavy boundary.

Bk—40 to 60 inches; reddish yellow (7.5YR 6/6) very cobbly silty clay loam, strong brown (7.5YR 5/6) moist; moderate fine and medium subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few very fine roots; common very fine and few fine tubular pores; 10 percent gravel and 30 percent cobbles; strongly effervescent; slightly alkaline (pH 7.4).

Range in Characteristics

Profile:
Thickness of mollic epipedon—10 to 20 inches
Depth to secondary carbonates—36 to 40 inches

Particle-size control section (average):
Clay content—35 to 40 percent
Rock fragment content—40 to 60 percent

A horizon:
Value—3 to 5 dry, 2 or 3 moist
Chroma—2 or 3 dry or moist

Bt horizon:
Value—4 to 6 dry or moist
Chroma—4 to 6 dry or moist
Texture—very cobbly clay loam or very cobbly silty clay loam

Bk horizon:
Hue—7.5YR
Value—5 or 6 dry, 4 or 5 moist
Chroma—4 to 6 dry or moist
Texture—very cobbly silt loam or very cobbly silty clay loam
Calcium carbonate equivalent—15 to 25 percent

Other Features

The Yago soils in this survey area do not have iron and manganese concretions in the lower part of the profile. This difference, however, does not affect the use and management of these soils.

Formation of the Soils

Terril Kay Stevenson, geologist, Natural Resources Conservation Service, helped to prepare this section.

Soil is a natural three-dimensional feature of the earth's surface capable of supporting life. It has developed as a result of the physical and chemical interaction of five factors—composition of parent material, climate, action of living organisms, relief, and time (Buckman and Brady, 1969). The interaction of these factors determines the properties of a given soil and how it develops.

The soils in this survey area have been influenced by a variety of climates ranging from the cold, wet pre-glacial climate to the present cool, dry post-glacial climate. The properties of the soils are dominantly a result of the influence of this type of climate on the mountains, which are composed of sedimentary rock and lakelaid deposits.

Parent Material

The dominant parent material in the survey area consists of alluvium and lacustrine sediment influenced by loess. Also included is some eolian, residual, and colluvial material. The most recent deposits are the alluvial and eolian deposits of the Quaternary Silt of the Lake Bonneville Group (Rember and Bennett, 1979). Gravel of this group form intermediate fan slopes around most of the valleys and lower slopes of the mountain ranges (Alt and Hyndman, 1989; Rember and Bennett, 1979). The oldest deposits are those of the residual and alluvial soils above the shoreline of Lake Bonneville, which formed about 15,000 to 30,000 years ago. The highest water level in the lake was about 5,100 feet in elevation (Alt and Hyndman, 1989).

The late Tertiary Salt Lake Group consists of tuffaceous sediment that mainly occupies intermediate and lower slopes around the valleys above the shoreline of Lake Bonneville, particularly in Arbon Valley and along the southeastern slopes of the Sublett Range (Bond, 1978; Isaacson, 1983; Rember and Bennett, 1979). The eastern slope of the Malad Range is also composed dominantly of Salt Lake Group sediment. In the northeastern part of the survey area is an area of Tertiary igneous rock called the Starlight Formation, which consists of basalt, tuff, perlite, ashflow tuff, and diamictite (Rember and Bennett, 1979; Staley, 1962).

The bedrock in the mountain ranges almost exclusively consists of hard, fractured, upper Paleozoic sedimentary rock (Isaacson, 1989; Piper, 1924; Rember and Bennett, 1979; Ross and Forrester, 1958; Skipp and others, 1980; Staley, 1962). The exception is the Malad Range, which consists of lower Paleozoic sediment including Silurian, Ordovician, and Cambrian dolomite, quartzite, shale, metasedimentary rock, and limestone. The Sublett and Promontory Ranges as well as the Blue Springs Hills and Deep Creek Mountains are Mississippian, Pennsylvanian, and Permian limestone, siltstone, sandstone, and shale (Isaacson, 1989; Rember and Bennett, 1979; Skipp and others, 1980). The oldest rock in the survey area is on Oxford Peak, in the Bannock Range. It consists of Precambrian sediment including quartzite, argillite, and amphibolite (Alt and Hyndman, 1989; Rember and Bennett, 1979; Ross and Forrester, 1958).

Soils in the mountainous areas of the survey area are highly variable because of the many types of rock. Other factors include variations in slope and the rate of weathering. Limestone, calcareous siltstone, and dolomite have contributed lime to most of the soils in the survey area. Another source of lime is calcareous loess deposited by southwesterly winds. The source of this loess is probably Lake Bonneville sediment from within the survey area and to the southwest of the area. Some of the dominant high-elevation soils are those of the Araveton, Ridgecrest, Thatcher, Watercanyon, and Wursten series. These soils dominantly formed in alluvium with some influence of calcareous loess.

Some of the mountainous soils formed in material that does not contain carbonates. These soils are well developed, they have a high content of clay, and/or a thick dark-colored surface layer. Examples are soils of the Broadhead, Clayburn, Manila, Northwater, Pavohroo, and Povey series.

The soils that formed in Tertiary igneous material in the northeastern part of the survey area are characterized by ashy material that contains a high percentage of volcanic debris from local pyroclastic flows (Alt and Hyndman, 1989; Rember and Bennett, 1979; Ross and Forrester, 1958). The soils have formed dominantly in alluvium and some residuum. They are poorly developed and have very little clay or organic matter. The Copenhagen, Lonigan, and Stines soils are dominant in this part of the survey area.

The intermediate terraces and drainageways in the survey area are comprised of alluvial and lacustrine soils that exhibit varying degrees of development. Elevation ranges from about 4,300 to 5,800 feet. Slopes are nearly level to steep. The soils are dominantly very deep, calcareous, and well drained, and they have a dark-colored surface layer. In soils such as those of the Rexburg, Ririe, Hans, Parleys, Kearns, Samaria, and Sterling series, the most notable feature is the presence of calcium carbonate. In most areas the calcium carbonate has been leached from the surface and has collected in the subsoil. These soils are in Arbon Valley. At the Lake Bonneville level (5,100 feet), the soils are gravelly in areas where the wave action has eroded rocky slopes at the edge of the shoreline. Examples are the Hondoho, Samaria, and Sterling soils in Arbon and Malad Valleys. To the west of Curlew Valley, Darkbull and Pyrat soils are examples.

Some of the soils at elevations of 4,300 to 5,800 feet formed in drainageways with meandering stream channels. Inkom, Jovine, and Goosenawt soils are examples. These soils are made up of thin layers that have been deposited by seasonal flooding during wetter years. In Pocatello Valley, the dominant soils of this type are those of the Bothwell, Elevator, and Povirt series. These soils are characterized by a high organic matter content in the topsoil, clay content of 30 percent or more, and calcium carbonate in some part of the drier soils. The Povirt soils are flooded annually, which leaches calcium carbonate out of the profile. The Bothwell and Elevator soils are drier; consequently, they have calcium carbonate from local parent material in the profile.

In Malad Valley, the parent material is somewhat similar to that in Pocatello Valley. Malad Valley consists of an old lakebed where water has influenced the properties of the soil. The lakebed has been dissected by the Malad River and nearby streams. A major difference between the soils in Pocatello Valley and those in Malad Valley is the content of salts. In Malad Valley, salts and lime are abundant in the soils. A constant supply of salts is provided by incoming water, and the parent material is also a source of salts. Soils in this area are those of the Bloor, Brinnum, Logan, and Langless series.

Soils of the Curlew Valley also developed in lakebed sediment. The Mellor soils in this area, near the Idaho-Utah border, are affected by the salts and sodium in the parent material. These soils have a thin subsoil near the surface, where salts and sodium have accumulated.

Climate

Climate has a strong influence on soil formation. Temperature and precipitation influence the rate of weathering and the deposition of soil layers. Vegetation, which provides organic matter for soil development, is also dependent on temperature and precipitation.

In this survey area, the climate is characterized by cool, wet winters and warm, dry summers. The driest and warmest areas are in the south and west, in Black Pine Valley. These areas receive about 8 inches of precipitation per year. By contrast, the wettest and coldest areas are in the high mountains at elevations of about 7,000 feet, where the annual rainfall is about 25 inches or more. The average annual temperature ranges from about 48 degrees F in the warmest areas to about 37 degrees in the coldest areas.

Soil development in the drier areas is slow, and the soils are characterized by a high content of salts and calcium carbonate. These soluble minerals are relatively stationary in this arid environment and are moved only by irrigation water. Other soil properties that developed under wetter conditions are now permanent features of the soils unless they are cropped. Examples are the thin argillic horizon near the surface of the Mellor soil and the calcic horizon in soils such as those of the Freedom and Bayhook series. These soils provide only a thin root zone for plants, thus very little organic matter is present for soil development.

Soils at elevations of about 5,100 to 6,000 feet have different properties because of the increase in precipitation and the reduction in temperature. These soils are characterized by a darker colored surface layer and a lighter colored subsoil with varying amounts of calcium carbonate. The darker color of the surface layer is a result of an increase in the amount of grass and other vegetation. The lighter color of the subsoil is a result of lime being leached to a greater depth in the profile. The dominant soils in this intermediate climatic zone are those of the Arbone, Kearns, Rexburg, and Ririe series. The average annual precipitation in this area ranges from 12 to 16 inches, and the average annual air temperature ranges from 42 to 52 degrees.

Soils above the Lake Bonneville shoreline receive 16 to 25 inches of precipitation. This additional moisture has resulted in lime being leached to a depth of 20 inches or more in most of the soils. A high content of organic matter in this area resulted in the formation of a dark-colored surface layer above the layer of lime. Depending on the landscape position and parent material, a few of these soils, such as those of the Manila and Broadhead series, have more than 35 percent clay in the subsoil. This too is related to the high precipitation. On soils such as those of the Ireland and Northwater series, the vegetation is very thick because of the cool, wet conditions and the north-facing slopes. Other soils in this vicinity that have a deep, dark-colored surface layer, a high content of clay in the subsoil, and lush vegetation are those of the Calpac, Hades, Jensen, and Thatcher series.

Soils above an elevation of 6,000 feet generally are poorly developed. Soils such as those of the Hymas and Hutchley series have been influenced by high rainfall, steep slopes, and cold temperatures. Under these conditions, the soil-forming factors are slowed. The microbial activity needed to form soil material is slowed by the cold soil temperatures. In addition, the soils in this environment are influenced by natural erosion such that the soil material is washed away nearly as fast as it can develop.

Living Organisms

Soil formation is greatly influenced by plant and animal activity. Organic matter, acidity, and bulk density are soil characteristics that are readily influenced by the kinds of plants and animals present.

The type of vegetation growing on a given soil is dependent on two main factors—the amount and quality of the water available to plants and the number of heat units available for plant growth.

In Curlew Valley, the natural conditions allow only for growth of vegetation that is tolerant of arid conditions. Only sparse stands of grass and other vegetation are present. Organic matter tends to oxidize faster under warm, dry conditions than under cooler, wetter conditions. Consequently, the soils in the warm, dry areas receive and accumulate very little organic matter and are light colored throughout. The dominant soils in the southern part of the valley are those of the Bayhook, Ecur, Mellor, and Freedom series. The vegetation is dominantly basin big sagebrush, needlegrass, greasewood, and Indian ricegrass. In the northern part of the valley, the precipitation is higher and the vegetation is more abundant. Consequently, the surface layer in these soils is darker colored. The dominant soils are those of the Rexburg, Ririe, Kearns, Arbone, and Parleys series. The dominant grasses are wheatgrass and bluegrass, and the dominant shrubs are antelope bitterbrush and basin big sagebrush or mountain big sagebrush. The plant communities in this area also have a percentage of forbs, primarily arrowleaf balsamleaf.

Pocatello Valley is a closed basin, which has influenced the vegetation and soil development. Spring snowmelt collects in the valley bottom, resulting in ponding in most years. The soils are dark-colored because of the abundant vegetation, which has contributed organic matter to the soils over the years. Pocatello Valley is now a fertile valley that can be successfully dryfarmed. The Povirt soils are in the lower areas in the valley, the Elevator and Bothwell soils are in the intermediate areas, and the Jensen soils are near the surrounding mountains.

Two types of poorly drained soils are south of Malad City. One consists of saline soils that are nearly barren in some areas or are sparsely vegetated with salt-tolerant plants. The other is closer to perennial streams and has a well-developed, deep, dark-colored root zone even though the calcium carbonate content is high. The soils in the saline areas are those of the Bloor, Brinnum, and Parehat series, and the dominant soils near streams are those of the Logan and Langless series.

Soils above the Lake Bonneville level (about 5,100 feet) formed under lush vegetation. Conditions are good for the growth of grasses, forbs, and shrubs. At the highest elevations (6,500 to 7,000 feet), the plant communities in swales and on north- and east-facing exposures include conifers. Several species of bluegrass and wheatgrass and many forbs and shrubs contribute a high amount of organic matter to these soils. Manila, Hades, Lonigan, and Rexburg soils are examples. These soils have the highest microbial activity of the soils in the survey area. Rodent and earthworm activity is also high, which increases tilth and fertility.

Relief

The relief in the survey area is primarily a result of mountain-building activities, and it affects microclimate, drainage, and runoff. The survey area is comprised of flood plains, lake terraces, dissected fan terraces, gently sloping to steep foothills, and steep mountainsides.

Soils on the lake plains have slopes of 0 to 4 percent. At elevations of about 4,300 feet, the soils that have slopes of 0 to 2 percent are poorly drained. Soils at slightly higher elevations are better drained and have steeper slopes. The water table is fed by three perennial streams that meandered widely before settling into their present channels.

The vertical distance between the lowest point of the lake plain and the upper Lake Bonneville shoreline is about 800 feet. The upper shoreline is marked by steeper areas where wave action has etched a line in the mountains. This line is visible as a continuous terrace following the contour of the shoreline. The soils that formed in the swash zone, where wave action and slope alluvium have formed terraces in the mountains, are composed of calcareous silt and coarse fragments. These soils include those of the Sterling, Samaria, Darkbull, and Pyrat series. In northern Curlew Valley, the old shore deposits are sandy. Ecur soils are in this area.

When Lake Bonneville breached at Red Rocks Pass, the water level dropped in a relatively short period of time and stabilized at the Provo Terrace level. A second terrace is visible where wave action caused terracing and other swash zone activity. The vertical distance between the Bonneville Terrace and the Provo Terrace is about 300 feet.

Soils between the lake plain and the Lake Bonneville shoreline are on nearly level to gently sloping terraces. In the southern part of the survey area, the landscape is dominated by lake plains. Near the mountains, the landscape gradually changes to gently sloping valleys and hills. Perennial streams have cut channels in the soils and have carried sediment from the gently sloping hills during runoff in spring. The dominant soils include those of the Arbone, Parleys, Welby, Kearns, Rexburg, Ririe, Hans, and Wheelon series. Stream action on the lake plain, which occurred while Lake Bonneville was receding, has deposited sand on the terrace escarpments. Winds have altered these deposits, forming dunes in areas where the wind velocity was sufficient. The soils that formed in these deposits are those of the Preston and Kidman series.

The soils above the Lake Bonneville shoreline are primarily on mountains. The mountains in the survey area are oriented north and south and are in three separate ranges—the Malad Range in the eastern part, the Sublett Range in the western part, and the Samaria Range in the central part, which is an active earthquake zone. The aspect and landscape position of the soils on mountains vary. The soils on ridgetops normally are very rocky and shallow, and the soils on toeslopes and in swales are very deep and loamy. The dominant soils on mountains are those of the Hymas, Ridgecrest, Povey, Ireland, Hutchley, Araveton, and Hades series.

Time

The degree of soil development is dependent on the period of time a parent material is exposed to other soil-forming factors and on the relief of the landscape. The age of a soil is gauged by the development of the layers in the profile. For example, two profiles that have been subject to similar factors except for the period of time would exhibit differences in the amount of organic matter in the surface, the amount of clay in the subsoil, and the depth to soluble minerals such as lime. Areas of soils below the Lake Bonneville shoreline have been forming for about 15,000 years. Many of these soils have a well-developed subsoil and a high level of organic matter.

The youngest soils in the survey area, such as those of the Preston and Kidman series, formed in windblown sand. These soils have very little organic matter, and they exhibit little subsoil development or signs of leaching.

The alluvial soils in the survey area are somewhat older than the soils that formed in windblown deposits. The alluvial soils have developed a well-defined surface layer and subsoil. At elevations below 5,100 feet (Lake Bonneville shoreline), the soils have been developing since Lake Bonneville receded. Above that elevation, the alluvial soils range from those that formed in material on very old fan terraces on mountain toeslopes to those that formed in recent deposits on mountainsides. Most of the soils below the Lake Bonneville shoreline are characterized by a dark-colored surface layer and a weakly developed subsoil with lime immediately below the subsoil. Welby, Parleys, Freedom and Kearns soils are examples.

Some of the older soils in the survey area are on toeslopes of steep mountainsides. Some of these soils, such as those of the Manila and Broadhead series, have been developing for more than 15,000 years and have heavy accumulations of clay in the subsoil. They commonly have a high content of organic matter in the upper part; however, this layer is somewhat eroded and may be very thin in the soils on ridges and side slopes.

Other older soils in the survey area are in concave areas on mountainsides. Soils such as those of the Northwater, Pavohroo, and Clayburn series are in areas where soil material accumulates. These soils are in swales on north- and east-facing slopes where material being moved downslope during runoff in spring is trapped.

Other older soils that have minimal development are the ashy soils in the northeastern and east-central parts of the survey area. Examples include those of the Copenhagen, Lonigan, and Stines series, which are made up of tuffaceous ash and fractured rhyolitic tuff. The high level of silica and the accelerated rate of erosion on these steeper slopes account for the lack of development in these soils.

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Glossary

ABC soil. A soil having an A, a B, and a C horizon.
AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.
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.
Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.
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.
Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.
Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.
Area reclaim (in tables). An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.
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

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.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout. A shallow depression from which all or most of the soil material has been removed by the wind. A blowout has a flat or irregular floor formed by a resistant layer or by an accumulation of pebbles or cobbles. In some blowouts the water table is exposed.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

California bearing ratio (CBR). The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Canyon. A long, deep, narrow, very steep sided valley with high, precipitous walls in an area of high local relief.

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.

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 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

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.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.

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 centimeters) 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 centimeters) 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.

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.

Compressible (in tables). Excessive decrease in volume of soft soil under load.

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.

Conglomerate. A coarse grained, clastic rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

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."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

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 and 40 or 80 inches.

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.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

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.

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.

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 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 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.

Excess fines (in tables). Excess silt and clay in the soil. The soil does not provide a source of gravel or sand for construction purposes.

Excess lime (in tables). Excess carbonates in the soil that restrict the growth of some plants.

Excess salts (in tables). Excess water-soluble salts in the soil that restrict the growth of most plants.

Excess sodium (in tables). Excess exchangeable sodium in the soil. The resulting poor physical properties restrict the growth of plants.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

Fast intake (in tables). The rapid movement of water into the soil.

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.

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.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) 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.

Fragile (in tables). A soil that is easily damaged by use or disturbance.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

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.

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 millimeters to 7.6 centimeters) 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 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet 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.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

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.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

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 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.

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.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

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.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.
Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.
Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.
Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.
Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well-sorted, generally fine-textured, stratified deposits, commonly containing varves.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

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.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

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.

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 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet 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.

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.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

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.

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.

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 meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Percs slowly (in tables). The slow movement of water through the soil adversely affects the specified use.

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.)

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the 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.

Playa. The generally dry and nearly level lake plain that occupies the lowest parts of closed depressional areas, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poor filter (in tables). Because of rapid or very rapid permeability, the soil may not adequately filter effluent from a waste disposal system.

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.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

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.

Range condition. The present composition of the plant community on a range site in relation to the potential natural plant community for that site. Range condition is expressed as excellent, good, fair, or poor on the basis of how much the present plant community has departed from the potential.

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.

Range site. An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range 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 range sites in kind or proportion of species or total production.

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.

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

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.

Rill. A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rooting depth (in tables). Shallow root zone. The soil is shallow over a layer that greatly restricts roots.

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 ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Salty water (in tables). Water that is too salty for consumption by livestock.

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.

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.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

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.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

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.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

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.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slippage (in tables). Soil mass susceptible to movement downslope when loaded, excavated, or wet.

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 20 percent
Moderately steep	20 to 30 percent
Steep	30 to 60 percent
Very steep	60 percent and higher

Slope (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

Slow intake (in tables). The slow movement of water into the soil.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Small stones (in tables). Rock fragments less than 3 inches (7.6 centimeters) in diameter. Small stones adversely affect the specified use of the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^{+} to Ca^{++} + Mg^{++}. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

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.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

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).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

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 centimeters). 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.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

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.”

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

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.

Too arid (in tables). The soil is dry most of the time, and vegetation is difficult to establish.

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.

Toxicity (in tables). Excessive amount of toxic substances, such as sodium or sulfur, that severely hinder establishment of vegetation or severely restrict plant growth.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Unstable fill (in tables). Risk of caving or sloughing on banks of fill material.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

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.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1948-91 at Malad City, Idaho)

Month	Temperature: Average daily maximum	Temperature: Average daily minimum	Temperature: Average	Temperature: 2 years in 10 will have-- Maximum temperature higher than--	Temperature: 2 years in 10 will have-- Minimum temperature lower than--	Temperature: Average number of growing degree days*	Precipitation: Average	Precipitation: 2 years in 10 will have-- Less than--	Precipitation: 2 years in 10 will have-- More than--	Precipitation: Average number of days with 0.10 inch or more	Precipitation: Average snowfall
	°F	*°F*	*°F*	*°F*	*°F*	*Units*	*In*	*In*	*In*		*In*
January	31.6	9.4	20.5	47	-22	0	1.15	0.63	1.60	4	11.1
February	38.2	14.4	26.3	57	-18	4	1.02	0.40	1.55	3	7.9
March	48.0	22.8	35.4	69	-1	37	1.07	0.49	1.57	3	4.7
April	59.6	30.0	44.8	80	15	171	1.16	0.49	1.74	3	1.7
May	69.5	37.4	53.4	87	22	415	1.75	0.70	2.63	4	0.2
June	79.8	43.7	61.7	96	29	652	1.26	0.44	1.94	3	0.0
July	89.6	49.6	69.6	100	36	917	1.00	0.23	1.65	2	0.0
August	87.9	48.0	68.0	99	34	866	0.85	0.20	1.37	2	0.0
September	78.0	39.1	58.6	93	23	557	0.98	0.25	1.64	2	0.0
October	64.9	29.7	47.3	83	15	246	1.00	0.38	1.65	2	0.5
November	46.7	22.2	34.4	67	-4	29	1.13	0.39	1.74	3	4.6
December	34.3	13.1	23.7	52	-16	1	1.15	0.48	1.77	4	10.2
Yearly:											
Average	60.7	29.9	45.3	---	---	---	---	---	---	---	---
Extreme	102	-35	---	100	-25	---	---	---	---	---	---
Total	---	---	---	---	---	3,895	13.53	9.34	16.42	35	40.9

Average number of days per year with at least 1 inch of snow on the ground: 76

*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 degrees F).

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1948-91 at Malad City, Idaho)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 19	June 7	June 27
2 years in 10 later than--	May 13	May 30	June 19
5 years in 10 later than--	May 1	May 15	June 5
First freezing temperature in fall:			
1 year in 10 earlier than--	September 23	September 11	August 31
2 years in 10 earlier than--	September 27	September 16	September 5
5 years in 10 earlier than--	October 6	September 24	September 14

Table 3.--Growing Season

(Recorded in the period 1948-91 at Malad City, Idaho)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	*Days*	*Days*
9 years in 10	132	106	72
8 years in 10	141	114	82
5 years in 10	157	131	101
2 years in 10	173	147	120
1 year in 10	181	156	129

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
1	Araveton-Hades complex, 4 to 12 percent slopes	4,510	0.7
2	Arbone silt loam, 0 to 4 percent slopes	1,650	0.2
3	Arbone silt loam, 4 to 12 percent slopes	9,040	1.3
4	Arbone silt loam, 12 to 20 percent slopes	20,305	3.0
5	Arbone-Hondoho-Cedarhill complex, 4 to 12 percent slopes	15,685	2.3
6	Arbone-Hondoho-Cedarhill complex, 12 to 30 percent slopes	17,725	2.6
7	Bayhook silt loam, 0 to 2 percent slopes	15,095	2.2
8	Bayhook-Ecur complex, 0 to 4 percent slopes	5,345	0.8
9	Bingham gravelly loam, 1 to 4 percent slopes	360	*
10	Bingham-Tirod complex, 0 to 2 percent slopes	1,045	0.2
11	Bloor-Brinnum complex, 0 to 2 percent slopes	1,750	0.3
12	Bothwell silt loam, 0 to 2 percent slopes	4,760	0.7
13	Bothwell-Hades-Justesen complex, 6 to 25 percent slopes	1,670	0.2
14	Brinnum-Logan-Langless complex, 0 to 2 percent slopes	1,865	0.3
15	Buckboard loam, 0 to 2 percent slopes	2,855	0.4
16	Buist gravelly silt loam, 20 to 30 percent slopes	445	*
17	Calpac-Ridgecrest-Ireland association, 40 to 70 percent slopes	8,285	1.2
18	Cedarhill gravelly silt loam, 4 to 12 percent slopes	1,510	0.2
19	Cedarhill gravelly silt loam, 12 to 30 percent slopes	1,140	0.2
20	Cedarhill-Hymas association, 20 to 55 percent slopes	1,565	0.2
21	Cedarhill-Lostine complex, 12 to 30 percent slopes	1,220	0.2
22	Collinston silt loam, 0 to 2 percent slopes	825	0.1
23	Collinston-Kearns complex, 2 to 12 percent slopes	1,645	0.2
24	Copenhagen-Lonigan-Manila association, 12 to 50 percent slopes	11,630	1.7
25	Darkbull-Pyrat-Ecur complex, 2 to 30 percent slopes	1,640	0.2
26	DeJarnet gravelly silt loam, 0 to 4 percent slopes	4,135	0.6
27	Dumps, mine	25	*
28	Ecur fine sandy loam, 0 to 4 percent slopes	3,300	0.5
29	Ecur-Darkbull complex, 1 to 8 percent slopes	8,090	1.2
30	Elevator silt loam, 0 to 4 percent slopes	7,500	1.1
31	Elevator-Jensen complex, 0 to 4 percent slopes	5,465	0.8
32	Elevator-Jensen complex, 4 to 12 percent slopes	7,705	1.1
33	Fridlo silt loam, 0 to 2 percent slopes	2,645	0.4
34	Goosenawt gravelly loam, 0 to 2 percent slopes	3,070	0.5
35	Hans silt loam, 0 to 2 percent slopes	6,720	1.0
36	Highcreek-Sterling complex, 4 to 12 percent slopes	3,340	0.5
37	Highcreek-Sterling complex, 12 to 25 percent slopes	575	*
38	Hillfield-Kucera complex, 4 to 30 percent slopes	2,195	0.3
39	Hillfield-Kucera complex, 30 to 50 percent slopes	935	0.1
40	Hondoho-Calpac-Lizdale association, 30 to 70 percent slopes	8,450	1.2
41	Hondoho-Hymas-Pavohroo association, 12 to 30 percent slopes	2,350	0.3
42	Hondoho-Hymas-Pavohroo association, 30 to 60 percent slopes	25,050	3.7
43	Hondoho-Ridgecrest-Hades association, 12 to 50 percent slopes	23,810	3.5
44	Hutchley-McCarey-Araveton complex, 4 to 40 percent slopes	14,095	2.1
45	Hymas-Calpac-Ireland association, 30 to 70 precent slopes	11,230	1.7
46	Hymas-Northwater-Clayburn association, 20 to 60 percent slopes	4,920	0.7
47	Hymas-Povey association, 30 to 60 percent slopes	5,125	0.8
48	Hymas-Povey-Pavohroo association, 30 to 70 percent slopes	9,735	1.4
49	Inkom silt loam, 0 to 1 percent slopes	755	0.1
50	Iphil-Ririe-Watercanyon complex, 8 to 20 percent slopes	490	*
51	Ireland-Calpac association, 30 to 60 percent slopes	22,625	3.3
52	Jensen silt loam, 0 to 2 percent slopes	1,320	0.2
53	Jensen silt loam, 2 to 6 percent slopes	415	*
54	Jensen-Iphil-Wursten complex, 4 to 12 percent slopes	1,100	0.2
55	Jovine silt loam, 0 to 2 percent slopes	2,920	0.4
56	Justesen silt loam, 4 to 12 percent slopes	605	*
57	Justesen silt loam, 12 to 25 percent slopes	2,495	0.4
58	Justesen-Ririe-Buist complex, 12 to 20 percent slopes	650	*
59	Kearns silt loam, 0 to 2 percent slopes	5,770	0.8
60	Kearns silt loam, 2 to 4 percent slopes	6,375	0.9
61	Kidman fine sandy loam, 1 to 4 percent slopes	5,550	0.8

See footnote at end of table.

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
62	Kidman-Preston association, 2 to 12 percent slopes	1,635	0.2
63	Kucera silt loam, 4 to 12 percent slopes	130	*
64	Lagonot silt loam, 0 to 3 percent slopes	2,915	0.4
65	Langless silt loam, 0 to 2 percent slopes	2,135	0.3
66	Langless-Logan complex, 0 to 2 percent slopes	880	0.1
67	Lanoak silt loam, 0 to 4 percent slopes	1,130	0.2
68	Lanoak silt loam, 12 to 30 percent slopes	390	*
69	Lanoak-Hondoho complex, 6 to 20 percent slopes	405	*
70	Logan silt loam, 0 to 2 percent slopes	4,215	0.6
71	Lonigan-Lizdale association, 6 to 40 percent slopes	2,205	0.3
72	Lostine silt loam, 20 to 30 percent slopes	175	*
73	Manila silt loam, 4 to 12 percent slopes	370	*
74	Manila-Broadhead complex, 4 to 12 percent slopes	7,555	1.1
75	Manila-Broadhead complex, 12 to 30 percent slopes	7,985	1.2
76	Manila-Lonigan complex, 6 to 40 percent slopes	3,025	0.4
77	Manila-Obnot complex, 4 to 12 percent slopes	1,855	0.3
78	Manila-Yago complex, 4 to 12 percent slopes	3,390	0.5
79	Manila-Yago complex, 12 to 30 percent slopes	1,770	0.3
80	Mellor-Freedom complex, 0 to 2 percent slopes	16,705	2.5
81	Neeley silt loam, 0 to 4 percent slopes	2,310	0.3
82	Northwater-Povey-Pavohroo association, 30 to 60 percent slopes	5,290	0.8
83	Parehat silt loam, 0 to 2 percent slopes	325	*
84	Parleys silt loam, 0 to 2 percent slopes	6,870	1.0
85	Parleys silt loam, 2 to 4 percent slopes	7,160	1.1
86	Parleys-Welby complex, 2 to 12 percent slopes	4,635	0.7
87	Parleys-Wheelon complex, 4 to 12 percent slopes	4,930	0.7
88	Pavohroo-Povey association, 30 to 60 percent slopes	6,485	1.0
89	Pavohroo-Stines-Lonigan association, 10 to 40 percent slopes	1,665	0.2
90	Pits, gravel	122	*
91	Povey-Hades-Hondoho association, 10 to 50 percent slopes	3,320	0.5
92	Povey-Ireland-Calpac association, 30 to 70 percent slopes	7,765	1.1
93	Povey-Pavohroo association, 30 to 60 percent slopes	15,045	2.2
94	Povirt silty clay loam, 0 to 2 percent slopes	1,630	0.2
95	Raldridge gravelly loam, 4 to 12 percent slopes	1,215	0.2
96	Rexburg silt loam, 1 to 4 percent slopes	1,065	0.2
97	Rexburg-Arbone-Ririe complex, 4 to 12 percent slopes	5,010	0.7
98	Rexburg-Arbone-Ririe complex, 12 to 25 percent slopes	1,050	0.2
99	Rexburg-Iphil-Watercanyon complex, 12 to 30 percent slopes	1,475	0.2
100	Rexburg-Lanoak complex, 4 to 12 percent slopes	1,775	0.3
101	Rexburg-Lanoak complex, 12 to 25 percent slopes	3,340	0.5
102	Rexburg-Lanoak-Watercanyon complex, 4 to 12 percent slopes	1,600	0.2
103	Rexburg-Ririe-Kucera complex, 2 to 8 percent slopes	5,715	0.8
104	Rexburg-Thatcher-Ririe complex, 12 to 30 percent slopes	1,010	0.1
105	Rexburg-Watercanyon-Lanoak complex, 12 to 20 percent slopes	2,155	0.3
106	Ridgecrest-Hondoho complex, 30 to 60 percent slopes	30,550	4.5
107	Ridgecrest-Hondoho-Hymas association, 30 to 60 percent slopes	9,345	1.4
108	Ridgecrest-Hondoho-Lizdale association, 30 to 60 percent slopes	12,215	1.8
109	Ridgecrest-Hymas association, 30 to 60 percent slopes	39,060	5.8
110	Ririe-Buist complex, 4 to 12 percent slopes	1,650	0.2
111	Ririe-Cedarhill complex, 4 to 12 percent slopes	1,260	0.2
112	Ririe-Cedarhill complex, 12 to 20 percent slopes	1,080	0.2
113	Ririe-Hondoho complex, 12 to 20 percent slopes	640	*
114	Ririe-Iphil-Kucera complex, 2 to 8 percent slopes	3,710	0.5
115	Ririe-Iphil-Rexburg complex, 4 to 12 percent slopes	6,235	0.9
116	Ririe-Rexburg complex, 4 to 12 percent slopes	16,340	2.4
117	Ririe-Watercanyon complex, 4 to 12 percent slopes	1,085	0.2
118	Ririe-Watercanyon complex, 12 to 30 percent slopes	1,570	0.2
119	Samaria silt loam, 0 to 4 percent slopes	2,245	0.3
120	Samaria silt loam, 4 to 8 percent slopes	1,790	0.3
121	Samaria-Pollynot complex, 4 to 12 percent slopes	9,030	1.3
122	Samaria-Sterling complex, 4 to 12 percent slopes	8,570	1.3

See footnote at end of table.

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
123	Sterling very gravelly loam, 12 to 20 percent slopes	2,845	0.4
124	Thatcher silt loam, 4 to 12 percent slopes	3,550	0.5
125	Thatcher-Jensen complex, 12 to 30 percent slopes	1,945	0.3
126	Freedom silt loam, 0 to 4 percent slopes	4,625	0.7
127	Tickason very fine sandy loam, 0 to 2 percent slopes	3,660	0.5
128	Tickason very fine sandy loam, 2 to 4 percent slopes	1,905	0.3
129	Tirod silt loam, 0 to 2 percent slopes	5,670	0.8
130	Toefoot silt loam, 0 to 4 percent slopes	1,935	0.3
131	Welby-Parleys complex, 0 to 2 percent slopes	1,695	0.2
132	Wursten gravelly silt loam, 4 to 15 percent slopes	360	*
133	Yago-Manila complex, 20 to 40 percent slopes	6,335	0.9
134	Water	1,168	0.2
	Total	679,000	100.0

* Less than 0.1 percent.

Table 5.--Land Capability and Yields per Acre of Crops and Pasture

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
1:										
Araveton-----------	3e	---	---	---	30.00	---	---	---	30.00	---
Hades--------------	3e	---	---	---	37.00	---	---	---	35.00	---
2:										
Arbone-------------	3c	---	1.00	---	30.00	---	2.50	---	25.00	---
3:										
Arbone-------------	3e	---	1.00	---	25.00	---	2.50	---	20.00	---
4:										
Arbone-------------	4e	---	---	---	23.00	---	---	---	18.00	---
5:										
Arbone-------------	3e	---	1.00	---	25.00	---	---	---	20.00	---
Hondoho------------	3e	---	1.00	---	35.00	---	---	---	30.00	---
Cedarhill----------	4e	---	1.50	---	30.00	---	---	---	25.00	---
6:										
Arbone-------------	4e	---	---	---	23.00	---	---	---	18.00	---
Hondoho------------	4e	---	---	---	30.00	---	---	---	25.00	---
Cedarhill----------	4e	---	---	---	30.00	---	---	---	25.00	---
7:										
Bayhook------------	6s	3s	---	---	---	70.00	---	---	---	55.00
8:										
Bayhook------------	6s	---	---	---	---	---	---	---	---	---
Ecur---------------	6c	---	---	---	---	---	---	---	---	---
9:										
Bingham------------	6s	3s	---	3.00	---	65.00	---	---	---	60.00
10:										
Bingham------------	6s	3s	---	3.00	---	65.00	---	---	---	60.00
Tirod--------------	3c	2c	---	3.50	---	70.00	---	---	---	65.00
11:										
Bloor--------------	7s	---	---	---	---	---	---	---	---	---
Brinnum------------	5w	---	---	---	---	---	---	---	---	---
12:										
Bothwell-----------	3c	---	1.50	---	40.00	---	---	---	35.00	---
13:										
Bothwell-----------	4e	6e	1.00	4.00	50.00	95.00	---	---	40.00	80.00
Hades--------------	4e	6e	1.50	4.00	30.00	80.00	---	---	30.00	80.00

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Barley N	Barley I	Pasture N	Pasture I	Wheat N	Wheat I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
13:										
Justesen----------	4e	6e	1.50	4.00	35.00	80.00	---	---	30.00	80.00
14:										
Brinnum-----------	5w	5w	---	---	---	---	1.00	1.50	---	---
Logan-------------	5w	5w	---	---	---	---	1.00	3.00	---	---
Langless----------	5w	5w	---	---	---	---	3.00	5.00	---	---
15:										
Buckboard---------	3c	---	1.00	---	35.00	---	---	---	30.00	---
16:										
Buist-------------	6e	---	---	---	---	---	---	---	---	---
17:										
Calpac------------	7e	---	---	---	---	---	---	---	---	---
Ridgecrest--------	7e	---	---	---	---	---	---	---	---	---
Ireland-----------	7e	---	---	---	---	---	---	---	---	---
18:										
Cedarhill---------	4e	---	1.50	---	30.00	---	---	---	25.00	---
19:										
Cedarhill---------	4e	---	---	---	---	---	---	---	25.00	---
20:										
Cedarhill---------	6e	---	---	---	---	---	---	---	---	---
Hymas-------------	6s	---	---	---	---	---	---	---	---	---
21:										
Cedarhill---------	4e	---	---	---	---	---	---	---	25.00	---
Lostine-----------	4e	---	---	---	---	---	---	---	25.00	---
22:										
Collinston--------	3c	---	---	---	40.00	---	---	---	35.00	---
23:										
Collinston--------	3e	---	---	---	40.00	---	---	---	35.00	---
Kearns------------	4e	---	---	---	35.00	---	---	---	30.00	---
24:										
Copenhagen--------	7e	---	---	---	---	---	---	---	---	---
Lonigan-----------	6e	---	---	---	---	---	---	---	---	---
Manila------------	6e	---	---	---	---	---	---	---	---	---
25:										
Darkbull----------	6e	---	---	---	---	---	---	---	---	---
Pyrat-------------	6e	---	---	---	---	---	---	---	---	---
Ecur--------------	6e	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
26:										
DeJarnet-----------	3c	---	---	---	25.00	---	---	---	25.00	---
27:										
Dumps, mine--------	8	---	---	---	---	---	---	---	---	---
28:										
Ecur---------------	6c	2e	---	---	---	60.00	---	---	---	---
29:										
Ecur---------------	6e	---	---	---	---	---	---	---	---	---
Darkbull-----------	6e	---	---	---	---	---	---	---	---	---
30:										
Elevator-----------	3c	---	1.50	---	40.00	---	---	---	30.00	---
31:										
Elevator-----------	3c	---	---	---	40.00	---	---	---	30.00	---
Jensen-------------	3c	---	---	---	35.00	---	---	---	40.00	---
32:										
Elevator-----------	3e	---	---	---	40.00	---	---	---	30.00	---
Jensen-------------	3e	---	---	---	35.00	---	---	---	40.00	---
33:										
Fridlo-------------	6s	4s	---	1.25	---	30.00	---	---	---	25.00
34:										
Goosenawt----------	3c	2c	2.00	4.00	40.00	70.00	---	---	35.00	55.00
35:										
Hans---------------	3c	2e	2.00	5.00	35.00	70.00	---	---	25.00	55.00
36:										
Highcreek----------	4e	---	---	---	30.00	---	---	---	27.00	---
Sterling-----------	3e	---	---	---	30.00	---	---	---	30.00	---
37:										
Highcreek----------	6e	---	---	---	20.00	---	---	---	20.00	---
Sterling-----------	3e	---	---	---	30.00	---	---	---	30.00	---
38:										
Hillfield----------	6e	---	---	---	30.00	---	---	---	20.00	---
Kucera-------------	4e	---	---	---	42.00	---	---	---	36.00	---
39:										
Hillfield----------	7e	---	---	---	---	---	---	---	---	---
Kucera-------------	7e	---	---	---	---	---	---	---	---	---
40:										
Hondoho------------	7e	---	---	---	---	---	---	---	---	---
Calpac-------------	7e	---	---	---	---	---	---	---	---	---
Lizdale------------	7e	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
41:										
Hondoho------------	4e	---	---	---	30.00	---	---	---	25.00	---
Hymas--------------	6s	---	---	---	---	---	---	---	---	---
Pavohroo-----------	4e	---	---	---	30.00	---	---	---	25.00	---
42:										
Hondoho------------	7e	---	---	---	---	---	---	---	---	---
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
Pavohroo-----------	7e	---	---	---	---	---	---	---	---	---
43:										
Hondoho------------	6e	---	---	---	---	---	---	---	---	---
Ridgecrest---------	6e	---	---	---	---	---	---	---	---	---
Hades--------------	6e	---	---	---	---	---	---	---	---	---
44:										
Hutchley-----------	6e	---	---	---	---	---	---	---	---	---
McCarey------------	4e	---	---	---	---	---	---	---	---	---
Araveton-----------	4e	---	---	---	---	---	---	---	---	---
45:										
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
Calpac-------------	7e	---	---	---	---	---	---	---	---	---
Ireland------------	7e	---	---	---	---	---	---	---	---	---
46:										
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
Northwater---------	7e	---	---	---	---	---	---	---	---	---
Clayburn-----------	7e	---	---	---	---	---	---	---	---	---
47:										
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
Povey--------------	7e	---	---	---	---	---	---	---	---	---
48:										
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
Povey--------------	7e	---	---	---	---	---	---	---	---	---
Pavohroo-----------	7e	---	---	---	---	---	---	---	---	---
49:										
Inkom--------------	4w	4w	---	---	---	55.00	7.00	10.00	---	45.00
50:										
Iphil--------------	4e	---	---	---	30.00	---	---	---	25.00	---
Ririe--------------	3e	---	---	---	35.00	---	---	---	30.00	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
50:										
Watercanyon--------	3e	---	---	---	20.00	---	---	---	20.00	---
51:										
Ireland------------	7e	---	---	---	---	---	---	---	---	---
Calpac-------------	7e	---	---	---	---	---	---	---	---	---
52:										
Jensen-------------	3c	---	---	---	25.00	---	---	---	25.00	---
53:										
Jensen-------------	3e	---	---	---	25.00	---	---	---	25.00	---
54:										
Jensen-------------	3e	4e	---	---	35.00	70.00	---	---	40.00	70.00
Iphil--------------	3e	4e	---	---	40.00	75.00	---	---	35.00	75.00
Wursten------------	3e	4e	---	---	30.00	60.00	---	---	25.00	65.00
55:										
Jovine-------------	3c	3c	2.00	4.00	35.00	70.00	---	---	30.00	70.00
56:										
Justesen-----------	3e	---	---	---	35.00	---	---	---	30.00	---
57:										
Justesen-----------	4e	---	---	---	35.00	---	---	---	30.00	---
58:										
Justesen-----------	4e	---	---	---	35.00	---	---	---	30.00	---
Ririe--------------	4e	---	---	---	30.00	---	---	---	25.00	---
Buist--------------	4e	---	---	---	30.00	---	---	---	25.00	---
59:										
Kearns-------------	3c	2c	1.25	4.00	40.00	70.00	---	---	35.00	55.00
60:										
Kearns-------------	3c	2c	1.25	4.00	40.00	70.00	---	---	35.00	55.00
61:										
Kidman-------------	3e	2e	---	6.00	---	100.00	---	---	---	---
62:										
Kidman-------------	3e	3e	---	5.00	---	90.00	---	---	---	---
Preston------------	6s	4s	---	3.50	---	85.00	---	---	---	---
63:										
Kucera-------------	3e	4e	2.50	4.00	35.00	80.00	6.00	10.00	30.00	70.00
64:										
Lagonot------------	3w	3w	1.50	3.00	25.00	70.00	3.00	5.00	20.00	65.00
65:										
Langless-----------	5w	5w	---	---	---	---	---	5.00	---	---
66:										
Langless-----------	5w	5w	---	---	---	---	---	5.00	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
66:										
Logan	5w	5w	---	---	---	---	---	3.00	---	---
67:										
Lanoak	3c	---	2.00	---	45.00	---	---	---	38.00	---
68:										
Lanoak	4e	---	1.50	---	42.00	---	---	---	35.00	---
69:										
Lanoak	3e	---	2.00	---	45.00	---	---	---	38.00	---
Hondoho	3e	---	1.00	---	35.00	---	---	---	30.00	---
70:										
Logan	5w	5w	---	---	---	---	---	3.00	---	---
71:										
Lonigan	6e	---	---	---	---	---	---	---	---	---
Lizdale	3e	---	---	---	---	---	---	---	---	---
72:										
Lostine	6e	---	---	---	---	---	---	---	---	---
73:										
Manila	3e	---	2.00	---	40.00	---	---	---	35.00	---
74:										
Manila	3e	---	---	---	40.00	---	---	---	35.00	---
Broadhead	3e	---	---	---	40.00	---	---	---	35.00	---
75:										
Manila	4e	---	---	---	35.00	---	---	---	30.00	---
Broadhead	4e	---	---	---	35.00	---	---	---	30.00	---
76:										
Manila	4e	---	---	---	35.00	---	---	---	---	---
Lonigan	4e	---	---	---	30.00	---	---	---	---	---
77:										
Manila	3e	---	---	---	40.00	---	---	---	35.00	---
Obnot	6s	---	---	---	20.00	---	---	---	20.00	---
78:										
Manila	3e	---	---	---	40.00	---	---	---	35.00	---
Yago	6e	---	---	---	30.00	---	---	---	30.00	---
79:										
Manila	4e	---	---	---	35.00	---	---	---	30.00	---
Yago	6e	---	---	---	30.00	---	---	---	30.00	---
80:										
Mellor	6s	4s	---	2.00	---	50.00	---	---	---	---
Freedom	6s	3s	---	3.50	---	50.00	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
81:										
Neeley	4c	2e	1.50	6.00	22.00	120.00	20.00	16.00	20.00	95.00
82:										
Northwater	7e	---	---	---	---	---	---	---	---	---
Povey	7e	---	---	---	---	---	---	---	---	---
Pavohroo	7e	---	---	---	---	---	---	---	---	---
83:										
Parehat	5w	5w	---	---	---	---	---	3.00	---	---
84:										
Parleys	3c	2c	1.50	5.50	35.00	70.00	---	---	30.00	70.00
85:										
Parleys	3e	2e	1.50	5.00	35.00	70.00	---	---	30.00	70.00
86:										
Parleys	3e	---	1.00	---	35.00	---	---	---	25.00	---
Welby	3e	---	1.50	---	25.00	---	---	---	25.00	---
87:										
Parleys	3e	3e	1.00	4.50	35.00	65.00	---	---	25.00	65.00
Wheelon	3e	4e	1.50	4.50	25.00	60.00	---	---	25.00	60.00
88:										
Pavohroo	7e	---	---	---	---	---	---	---	---	---
Povey	7e	---	---	---	---	---	---	---	---	---
89:										
Pavohroo	6e	---	---	---	---	---	---	---	---	---
Stines	4e	---	---	---	---	---	---	---	---	---
Lonigan	6e	---	---	---	---	---	---	---	---	---
90:										
Pits, gravel	8	---	---	---	---	---	---	---	---	---
91:										
Povey	6e	---	---	---	---	---	---	---	---	---
Hades	6e	---	---	---	---	---	---	---	---	---
Hondoho	6e	---	---	---	---	---	---	---	---	---
92:										
Povey	7e	---	---	---	---	---	---	---	---	---
Ireland	7e	---	---	---	---	---	---	---	---	---
Calpac	7e	---	---	---	---	---	---	---	---	---
93:										
Povey	7e	---	---	---	---	---	---	---	---	---
Pavohroo	7e	---	---	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
94:										
Povirt	3w	---	---	---	35.00	---	---	---	38.00	---
95:										
Raldridge	3e	---	---	---	25.00	---	---	---	25.00	---
96:										
Rexburg	3c	3e	2.00	5.00	40.00	90.00	---	---	35.00	80.00
97:										
Rexburg	3e	---	2.00	---	40.00	---	---	---	35.00	---
Arbone	3e	---	1.00	---	25.00	---	---	---	20.00	---
Ririe	3e	---	2.00	---	35.00	---	---	---	30.00	---
98:										
Rexburg	4e	---	---	---	40.00	---	---	---	35.00	---
Arbone	4e	---	---	---	23.00	---	---	---	18.00	---
Ririe	4e	---	---	---	30.00	---	---	---	25.00	---
99:										
Rexburg	6e	---	---	---	30.00	---	---	---	25.00	---
Iphil	6e	---	---	---	20.00	---	---	---	20.00	---
Watercanyon	6e	---	---	---	12.00	---	---	---	12.00	---
100:										
Rexburg	3e	---	2.00	---	40.00	---	---	---	35.00	---
Lanoak	3e	---	2.00	---	45.00	---	---	---	38.00	---
101:										
Rexburg	4e	---	2.00	---	40.00	---	---	---	35.00	---
Lanoak	4e	---	1.50	---	42.00	---	---	---	35.00	---
102:										
Rexburg	3e	---	---	---	40.00	---	---	---	35.00	---
Lanoak	3e	---	---	---	45.00	---	---	---	38.00	---
Watercanyon	3e	---	---	---	20.00	---	---	---	20.00	---
103:										
Rexburg	3e	3e	2.00	5.00	40.00	90.00	---	---	35.00	80.00
Ririe	3e	4e	2.00	4.00	35.00	80.00	---	---	30.00	70.00
Kucera	3e	4e	2.50	4.00	35.00	80.00	---	---	30.00	70.00
104:										
Rexburg	6e	---	---	---	30.00	---	---	---	25.00	---
Thatcher	6e	---	---	---	30.00	---	---	---	25.00	---
Ririe	6e	---	---	---	25.00	---	---	---	20.00	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
105:										
Rexburg------------	4e	---	---	---	40.00	---	---	---	35.00	---
Watercanyon--------	4e	---	---	---	15.00	---	---	---	15.00	---
Lanoak-------------	4e	---	---	---	42.00	---	---	---	35.00	---
106:										
Ridgecrest---------	7e	---	---	---	---	---	---	---	---	---
Hondoho------------	7e	---	---	---	---	---	---	---	---	---
107:										
Ridgecrest---------	7e	---	---	---	---	---	---	---	---	---
Hondoho------------	7e	---	---	---	---	---	---	---	---	---
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
108:										
Ridgecrest---------	7e	---	---	---	---	---	---	---	---	---
Hondoho------------	7e	---	---	---	---	---	---	---	---	---
Lizdale------------	7e	---	---	---	---	---	---	---	---	---
109:										
Ridgecrest---------	7e	---	---	---	---	---	---	---	---	---
Hymas--------------	7s	---	---	---	---	---	---	---	---	---
110:										
Ririe--------------	3e	---	---	---	35.00	---	---	---	30.00	---
Buist--------------	3e	---	---	---	35.00	---	---	---	30.00	---
111:										
Ririe--------------	3e	---	---	---	---	---	---	---	30.00	---
Cedarhill----------	3e	---	---	---	---	---	---	---	30.00	---
112:										
Ririe--------------	4e	---	---	---	---	---	---	---	25.00	---
Cedarhill----------	4e	---	---	---	---	---	---	---	25.00	---
113:										
Ririe--------------	4e	---	1.50	---	30.00	---	---	---	25.00	---
Hondoho------------	3e	---	1.00	---	35.00	---	---	---	30.00	---
114:										
Ririe--------------	3e	---	2.00	---	35.00	---	---	---	30.00	---
Iphil--------------	3e	---	2.50	---	35.00	---	---	---	30.00	---
Kucera-------------	3e	---	2.50	---	35.00	---	---	---	30.00	---
115:										
Ririe--------------	3e	---	2.00	---	35.00	---	---	---	30.00	---
Iphil--------------	3e	---	2.50	---	35.00	---	---	---	30.00	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Barley N	Barley I	Pasture N	Pasture I	Wheat N	Wheat I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
115:										
Rexburg------------	3e	---	2.00	---	40.00	---	---	---	35.00	---
116:										
Ririe--------------	3e	4e	2.00	4.00	35.00	80.00	---	---	30.00	70.00
Rexburg------------	3e	4e	2.00	4.00	40.00	80.00	---	---	35.00	70.00
117:										
Ririe--------------	3e	---	---	---	35.00	---	---	---	30.00	---
Watercanyon--------	3e	---	---	---	20.00	---	---	---	20.00	---
118:										
Ririe--------------	6e	---	---	---	25.00	---	---	---	20.00	---
Watercanyon--------	6e	---	---	---	12.00	---	---	---	12.00	---
119:										
Samaria------------	3c	3c	1.50	3.00	35.00	65.00	---	---	30.00	60.00
120:										
Samaria------------	3e	3e	1.00	1.50	35.00	40.00	---	---	30.00	40.00
121:										
Samaria------------	3e	---	1.00	---	35.00	---	---	---	30.00	---
Pollynot-----------	3e	---	1.00	---	35.00	---	---	---	35.00	---
122:										
Samaria------------	3e	---	---	---	35.00	---	---	---	30.00	---
Sterling-----------	3e	---	---	---	30.00	---	---	---	30.00	---
123:										
Sterling-----------	3e	---	---	---	30.00	---	---	---	30.00	---
124:										
Thatcher-----------	4e	4e	---	4.00	35.00	70.00	---	---	30.00	60.00
125:										
Thatcher-----------	6e	---	---	---	30.00	---	---	---	25.00	---
Jensen-------------	4e	---	---	---	30.00	---	---	---	25.00	---
126:										
Freedom------------	6s	3s	---	3.50	---	50.00	---	7.00	---	60.00
127:										
Tickason-----------	4c	2c	---	5.50	30.00	110.00	---	---	25.00	100.00
128:										
Tickason-----------	4c	2e	---	5.50	25.00	110.00	---	---	20.00	100.00
129:										
Tirod--------------	3c	2c	---	3.50	---	70.00	---	---	---	65.00
130:										
Toefoot------------	3e	---	1.00	---	35.00	---	2.50	---	30.00	---
131:										
Welby--------------	3c	2c	2.00	4.00	35.00	80.00	---	---	30.00	70.00

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Pasture		Wheat	
	N	I	N	I	N	I	N	I	N	I
			Tons	*Tons*	*Bu*	*Bu*	*AUM*	*AUM*	*Bu*	*Bu*
131:										
Parleys------------	3c	2c	1.50	5.50	35.00	70.00	---	---	30.00	70.00
132:										
Wursten------------	3e	---	---	---	30.00	---	---	---	25.00	---
133:										
Yago---------------	6e	---	---	---	30.00	---	---	---	30.00	---
Manila-------------	6e	---	---	---	40.00	---	---	---	35.00	---
134:										
Water--------------	---	---	---	---	---	---	---	---	---	---

Table 6.--Rangeland Productivity and Characteristic Plant Communities

(Only the soils that support rangeland vegetation suitable for grazing are listed)

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
4:						
Arbone	Loamy 13-16 Artrv/pssp6	1,800	1,400	700	Bluebunch wheatgrass	30
					Mountain big sagebrush	10
					Miscellaneous perennial grasses	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Lupine	5
					Prairie Junegrass	5
7:						
Bayhook	Loamy 8-11 Artrt/pssp6	800	550	300	Bluebunch wheatgrass	40
					Basin big sagebrush	20
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Western wheatgrass	5
8:						
Bayhook	Loamy 8-11 Artrt/pssp6	800	550	300	Bluebunch wheatgrass	40
					Basin big sagebrush	20
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Western wheatgrass	5
Ecur	Loamy 11-13 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5
11:						
Bloor	Alkali Flats 8-12 Atco/elel5	500	350	175	Bottlebrush squirreltail	25
					Shadscale saltbush	25
					Black greasewood	10
					Basin big sagebrush	5
Brinnum	Semiwet Saline Meadow	2,000	1,500	750	Inland saltgrass	25
					Alkali sacaton	15
					Black greasewood	10
					Bottlebrush squirreltail	5
					Gardner saltbush	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
13:						
Bothwell	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Utah snowberry	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Miscellaneous perennial forbs	5
					Miscellaneous perennial grasses	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5
Hades	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	45
					Miscellaneous perennial forbs	10
					Miscellaneous perennial grasses	10
					Slender wheatgrass	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Mountain big sagebrush	5
					Miscellaneous shrubs	5
Justesen	Loamy 13-16 Artrv/pssp6	1,900	1,400	700	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
14:						
Brinnum	Semiwet Saline Meadow	2,000	1,500	750	Inland saltgrass	25
					Alkali sacaton	15
					Black greasewood	10
					Bottlebrush squirreltail	5
					Gardner saltbush	5
Logan	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Fowl bluegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
14:						
Langless	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Shrubby cinquefoil	5
					Slender wheatgrass	5
					Willow	5
16:						
Buist	Loamy 12-16 Artrt/pssp6	1,800	1,400	700	Bluebunch wheatgrass	35
					Basin big sagebrush	20
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5
17:						
Calpac	Steep Slope 16-22 Artrv/pssp6	2,200	1,900	1,300	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Geranium	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
Ridgecrest	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Antelope bitterbrush	5
					Mountain brome	5
					Slender wheatgrass	5
Ireland	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	850	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Slender wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
18:						
Cedarhill	Gravelly Loam 16-22 Artrv/pssp6	1,100	800	500	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Western wheatgrass	10
					Nevada bluegrass	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
19:						
Cedarhill	Gravelly Loam 16-22 Artrv/pssp6	1,100	800	500	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Western wheatgrass	10
					Nevada bluegrass	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
20:						
Cedarhill	Gravelly Loam 16-22 Artrv/pssp6	1,100	800	500	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Western wheatgrass	10
					Nevada bluegrass	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
21:						
Cedarhill	Gravelly Loam 16-22 Artrv/pssp6	1,100	800	500	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Western wheatgrass	10
					Nevada bluegrass	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
21:						
Lostine	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	30
					Idaho fescue	10
					Arrowleaf balsamroot	10
					Miscellaneous perennial grasses	10
					Columbia needlegrass	5
					Mountain big sagebrush	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Miscellaneous perennial forbs	3
					Sticky geranium	2
24:						
Copenhagen	Shallow Loamy 13-16 Artrv/pssp6	850	650	350	Bluebunch wheatgrass	30
					Mountain big sagebrush	20
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Green rabbitbrush	5
					Longleaf hawksbeard	5
Lonigan	Ashy Loam 13-16 Artrv/pssp6	1,400	1,000	500	Bluebunch wheatgrass	25
					Mountain big sagebrush	20
					Arrowleaf balsamroot	10
					Antelope bitterbrush	5
Manila	Loamy 16-22 Artrv/pssp6 16-22"	2,200	1,700	1,000	Bluebunch wheatgrass	30
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5
25:						
Darkbull	Loamy 11-13 Artrt/pssp6	1,400	700	500	Bluebunch wheatgrass	45
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Bottlebrush squirreltail	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
25:						
Pyrat	Limestone Gravelly 12-16 Arno4/pssp6	900	550	400	Bluebunch wheatgrass	35
					Black sagebrush	25
					Nevada bluegrass	5
					Spiny phlox	5
Ecur	Loamy 11-13 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5
26:						
DeJarnet	Loamy 11-13 Artrt/pssp6	1,300	800	500	Bluebunch wheatgrass	45
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Bottlebrush squirreltail	5
28:						
Ecur	Sandy 8-12 Juos/artrt/achy	900	650	300	Bluebunch wheatgrass	45
					Indian ricegrass	25
					Utah juniper	5
					Antelope bitterbrush	5
					Basin big sagebrush	5
					Western wheatgrass	5
29:						
Ecur	Loamy 11-13 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5
Darkbull	Loamy 11-13 Artrt/pssp6	1,400	700	500	Bluebunch wheatgrass	45
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Bottlebrush squirreltail	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
32:						
Elevator	Loamy 12-16 Artrt/pssp6	1,900	1,400	700	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	10
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Streambank wheatgrass	5
Jensen	Loamy 12-16 Artrt/pssp6	1,900	1,400	700	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5
36:						
Highcreek	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5
Sterling	Loamy 12-16 Artrt/pssp6	1,500	1,100	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5
37:						
Highcreek	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
37:						
Sterling	Loamy 12-16 Artrt/pssp6	1,500	1,100	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Western wheatgrass	5
38:						
Hillfield	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	30
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Helianthella	5
					Prairie Junegrass	5
Kucera	Loamy 11-13 Artrt/pssp6	1,600	900	500	Bluebunch wheatgrass	30
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Green rabbitbrush	5
					Needlegrass	5
39:						
Hillfield	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	30
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Helianthella	5
					Prairie Junegrass	5
Kucera	Loamy 11-13 Artrt/pssp6	1,600	900	500	Bluebunch wheatgrass	30
					Basin big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Green rabbitbrush	5
					Needlegrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
40:						
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
Calpac	Steep Slope 16-22 Artrv/pssp6	2,200	1,900	1,300	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Geranium	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
Lizdale	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Slender wheatgrass	5
41:						
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
41:						
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
42:						
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
43:						
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
43:						
Ridgecrest	Loamy 16-22 Artrv/pssp6 16-22"	2,300	1,700	900	Bluebunch wheatgrass	30
					Columbia needlegrass	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Mountain big sagebrush	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
Hades	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	45
					Miscellaneous perennial forbs	10
					Miscellaneous perennial grasses	10
					Slender wheatgrass	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Mountain big sagebrush	5
					Miscellaneous shrubs	5
44:						
Hutchley	Shallow Loamy 13-16 Artrv/pssp6	900	600	350	Bluebunch wheatgrass	30
					Mountain big sagebrush	20
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Dwarf green rabbitbrush	5
McCarey	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Utah snowberry	5
					Antelope bitterbrush	5
					Helianthella	5
					Prairie Junegrass	5
					Slender wheatgrass	5
Araveton	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
45:						
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
Calpac	Steep Slope 16-22 Artrv/pssp6	2,200	1,900	1,300	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Geranium	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
Ireland	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	850	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Slender wheatgrass	5
46:						
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
Northwater	Mountain Loamy 22+ Psmeg/syor2	500	350	150	Oregongrape	10
					Boxleaf myrtle	10
					Mallow ninebark	10
					Whortleleaf snowberry	10
					Douglas fir	5
					Rocky Mountain maple	5
					Bearded wheatgrass	5
					Strawberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
46:						
Clayburn	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Utah snowberry	5
					Arrowleaf balsamroot	5
					Mountain brome	5
					Sticky geranium	5
47:						
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5
48:						
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
48:						
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
49:						
Inkom	Riparian Wet Meadow Salix/carex	4,600	3,500	2,000	Sedge	50
					Tufted hairgrass	10
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Shrubby cinquefoil	5
					Slender wheatgrass	5
					Willow	5
51:						
Ireland	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	850	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Slender wheatgrass	5
Calpac	Steep Slope 16-22 Artrv/pssp6	2,200	1,900	1,300	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Geranium	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
55:						
Jovine	Loamy Bottom 12-16 Artrt/leci4-Agrop	1,600	1,200	600	Basin big sagebrush	20
					Basin wildrye	15
					Thickspike wheatgrass	15
					Bluebunch wheatgrass	5
					Green rabbitbrush	5
					Western wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
56:						
Justesen	Loamy 13-16 Artrv/pssp6	1,900	1,400	700	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
57:						
Justesen	Loamy 13-16 Artrv/pssp6	1,900	1,400	700	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
62:						
Kidman	Sand 12-16 Putr2/achy	1,200	900	500	Indian ricegrass	20
					Basin big sagebrush	15
					Needleandthread	15
					Antelope bitterbrush	10
					Arrowleaf balsamroot	5
					Bluebunch wheatgrass	5
					Western wheatgrass	5
Preston	Sand 8-12 Artrt/achy	800	600	300	Indian ricegrass	35
					Needleandthread	20
					Basin big sagebrush	15
					Western wheatgrass	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Lemon scurfpea	5
65:						
Langless	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Shrubby cinquefoil	5
					Slender wheatgrass	5
					Willow	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
66:						
Langless	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Shrubby cinquefoil	5
					Slender wheatgrass	5
					Willow	5
Logan	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Fowl bluegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5
70:						
Logan	Wet Meadow	3,900	3,000	2,400	Sedge	20
					Tufted hairgrass	15
					Baltic rush	5
					Cinquefoil	5
					Clover	5
					Fowl bluegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5
71:						
Lonigan	Ashy Loam 13-16 Artrv/pssp6	1,400	1,000	500	Bluebunch wheatgrass	25
					Mountain big sagebrush	20
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
Lizdale	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,000	Bluebunch wheatgrass	35
					Arrowleaf balsamroot	10
					Mountain big sagebrush	10
					Utah snowberry	5
					Antelope bitterbrush	5
					Slender wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
72:						
Lostine	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	30
					Idaho fescue	10
					Arrowleaf balsamroot	10
					Miscellaneous perennial grasses	10
					Columbia needlegrass	5
					Mountain big sagebrush	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Miscellaneous perennial forbs	3
					Sticky geranium	2
73:						
Manila	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass	40
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5
74:						
Manila	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass	40
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5
Broadhead	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Geranium	5
					Slender wheatgrass	5
					Snowberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
75:						
Manila------------------	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass-----------	40
					Mountain big sagebrush---------	10
					Columbia needlegrass-----------	5
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Sticky geranium----------------	5
Broadhead---------------	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass-----------	35
					Mountain big sagebrush---------	10
					Columbia needlegrass-----------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Geranium-----------------------	5
					Slender wheatgrass-------------	5
					Snowberry----------------------	5
76:						
Manila------------------	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass-----------	40
					Mountain big sagebrush---------	10
					Columbia needlegrass-----------	5
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Sticky geranium----------------	5
Lonigan-----------------	Ashy Loam 13-16 Artrv/pssp6	1,400	1,000	500	Bluebunch wheatgrass-----------	25
					Mountain big sagebrush---------	20
					Arrowleaf balsamroot-----------	10
					Antelope bitterbrush-----------	5
77:						
Manila------------------	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass-----------	40
					Mountain big sagebrush---------	10
					Columbia needlegrass-----------	5
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Sticky geranium----------------	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
77:						
Obnot	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	35
					Arrowleaf balsamroot	10
					Mountain big sagebrush	10
					Utah snowberry	5
					Antelope bitterbrush	5
					Prairie Junegrass	5
					Slender wheatgrass	5
78:						
Manila	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass	40
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5
Yago	Stony Loam 16-22 Artrv/pssp6	1,800	1,100	600	Bluebunch wheatgrass	30
					Mountain big sagebrush	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
79:						
Manila	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,200	Bluebunch wheatgrass	40
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Sticky geranium	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
79:						
Yago	Stony Loam 16-22 Artrv/pssp6	1,800	1,100	600	Bluebunch wheatgrass	30
					Mountain big sagebrush	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5
80:						
Mellor	Alkali Flats 8-12 Atco/elel5	500	350	200	Bottlebrush squirreltail	25
					Shadscale saltbush	25
					Black greasewood	15
					Sand dropseed	5
					Scarlet globemallow	5
					Winterfat	5
Freedom	Loamy 8-11 Artrt/pssp6	800	600	300	Bluebunch wheatgrass	40
					Basin big sagebrush	15
					Bottlebrush squirreltail	5
					Longleaf hawksbeard	5
					Miscellaneous shrubs	5
81:						
Neeley	Loamy 11-13 Artrt/pssp6	1,100	800	400	Bluebunch wheatgrass	40
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Bottlebrush squirreltail	5
82:						
Northwater	Mountain Loamy 22+ Psmeg/syor2	500	350	150	Oregongrape	10
					Boxleaf myrtle	10
					Mallow ninebark	10
					Whortleleaf snowberry	10
					Douglas fir	5
					Rocky Mountain maple	5
					Bearded wheatgrass	5
					Strawberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
82:						
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
86:						
Parleys	Loamy 12-16 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Nevada bluegrass	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Western wheatgrass	5
Welby	Loamy 12-16 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
					Western wheatgrass	5
88:						
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
88:						
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5
89:						
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
Stines	Loamy 16-22 Artrv/pssp6 16-22"	2,100	1,700	1,200	Bluebunch wheatgrass	40
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Geranium	5
					Slender wheatgrass	5
					Snowberry	5
Lonigan	Ashy Loam 13-16 Artrv/pssp6	1,400	1,000	500	Bluebunch wheatgrass	25
					Mountain big sagebrush	20
					Arrowleaf balsamroot	10
					Antelope bitterbrush	5
91:						
Povey	Loamy 16-22 Artrv/pssp6 16-22"	2,600	2,000	1,000	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Slender wheatgrass	5
					Snowberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
91:						
Hades	Loamy 16-22 Artrv/pssp6 16-22"	2,400	2,000	1,400	Bluebunch wheatgrass	45
					Miscellaneous perennial forbs	10
					Miscellaneous perennial grasses	10
					Slender wheatgrass	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Mountain big sagebrush	5
					Miscellaneous shrubs	5
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
92:						
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5
Ireland	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	850	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Slender wheatgrass	5
Calpac	Steep Slope 16-22 Artrv/pssp6	2,200	1,900	1,300	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Geranium	5
					Mountain brome	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Snowberry	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
93:						
Povey	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	25
					Mountain big sagebrush	15
					Slender wheatgrass	10
					Columbia needlegrass	5
					Arrowleaf balsamroot	5
					Snowberry	5
Pavohroo	Moist Mountain Loam 20+ Potr5	2,500	1,500	900	Blue wildrye	10
					Mountain brome	10
					Woods' rose	5
					Common snowberry	5
					Quaking aspen	5
					Slender wheatgrass	5
					Sticky geranium	5
					Willow	5
95:						
Raldridge	Loamy 11-13 Artrt/pssp6	1,400	700	500	Bluebunch wheatgrass	45
					Basin big sagebrush	20
					Arrowleaf balsamroot	10
					Antelope bitterbrush	5
					Bottlebrush squirreltail	5
97:						
Rexburg	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	30
					Miscellaneous perennial grasses	15
					Mountain big sagebrush	10
					Miscellaneous perennial forbs	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Needlegrass	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Western wheatgrass	5
Arbone	Loamy 13-16 Artrv/pssp6	1,800	1,400	700	Bluebunch wheatgrass	30
					Mountain big sagebrush	10
					Miscellaneous perennial grasses	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Lupine	5
					Prairie Junegrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
97:						
Ririe------------------	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass-----------	30
					Miscellaneous perennial grasses	15
					Mountain big sagebrush---------	10
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Needlegrass--------------------	5
					Miscellaneous perennial forbs--	5
					Miscellaneous shrubs-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Western wheatgrass-------------	5
98:						
Rexburg----------------	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass-----------	30
					Miscellaneous perennial grasses	15
					Mountain big sagebrush---------	10
					Miscellaneous perennial forbs--	10
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Needlegrass--------------------	5
					Miscellaneous shrubs-----------	5
					Prairie Junegrass--------------	5
					Western wheatgrass-------------	5
Arbone-----------------	Loamy 13-16 Artrv/pssp6	1,800	1,400	700	Bluebunch wheatgrass-----------	30
					Mountain big sagebrush---------	10
					Miscellaneous perennial grasses	10
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Lupine-------------------------	5
					Prairie Junegrass--------------	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
98:						
Ririe	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	30
					Miscellaneous perennial grasses	15
					Mountain big sagebrush	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Needlegrass	5
					Miscellaneous perennial forbs	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5
106:						
Ridgecrest	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Antelope bitterbrush	5
					Mountain brome	5
					Slender wheatgrass	5
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
107:						
Ridgecrest	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Antelope bitterbrush	5
					Mountain brome	5
					Slender wheatgrass	5
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
107:						
Hymas	Shallow Stony 12-16 Arar8/pssp6	1,000	600	300	Bluebunch wheatgrass	35
					Low sagebrush	10
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Spiny phlox	5
108:						
Ridgecrest	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Antelope bitterbrush	5
					Mountain brome	5
					Slender wheatgrass	5
Hondoho	Steep Slope 16-22 Artrv/pssp6	2,100	1,600	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Prairie Junegrass	5
Lizdale	Steep Slope 16-22 Artrv/pssp6	2,400	1,800	900	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Nevada bluegrass	5
					Utah snowberry	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Slender wheatgrass	5
109:						
Ridgecrest	Steep Slope 16-22 Artrv/pssp6	2,000	1,500	800	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Antelope bitterbrush	5
					Mountain brome	5
					Slender wheatgrass	5
Hymas	Shallow Juniper Breaks 13-16 Juos/artrv/pssp6	700	500	250	Bluebunch wheatgrass	35
					Utah juniper	10
					Arrowleaf balsamroot	10
					Antelope bitterbrush	5
					Longleaf hawksbeard	5
					Mountain big sagebrush	5
					Spiny phlox	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Normal year	Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	Lb/acre	Lb/acre		Pct
110:						
Ririe	Loamy 13-16 Artrv/pssp6	1,500	1,200	800	Bluebunch wheatgrass	25
					Mountain big sagebrush	10
					Slender wheatgrass	10
					Idaho fescue	5
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Longleaf hawksbeard	5
					Needlegrass	5
					Miscellaneous perennial forbs	5
					Miscellaneous perennial grasses	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Western wheatgrass	5
Buist	Loamy 13-16 Artrv/pssp6	1,700	1,100	700	Bluebunch wheatgrass	35
					Mountain big sagebrush	10
					Miscellaneous shrubs	10
					Idaho fescue	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Miscellaneous perennial forbs	5
					Miscellaneous perennial grasses	5
					Prairie Junegrass	5
					Slender wheatgrass	5
117:						
Ririe	Loamy 13-16 Artrv/pssp6	1,800	1,200	800	Bluebunch wheatgrass	30
					Miscellaneous perennial grasses	15
					Mountain big sagebrush	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Needlegrass	5
					Miscellaneous perennial forbs	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5
Watercanyon	Shallow Loamy 13-16 Artrv/pssp6	950	700	350	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Arrowleaf balsamroot	10
					Nevada bluegrass	5
					Antelope bitterbrush	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
118:						
Ririe	Loamy 13-16 Artrv/pssp6	1,500	1,100	600	Bluebunch wheatgrass	20
					Mountain big sagebrush	15
					Miscellaneous perennial grasses	10
					Western snowberry	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
					Arrowleaf balsamroot	5
					Needlegrass	5
					Miscellaneous perennial forbs	5
					Miscellaneous shrubs	5
					Prairie Junegrass	5
					Slender wheatgrass	5
					Western wheatgrass	5
Watercanyon	Shallow Loamy 13-16 Artrv/pssp6	950	700	350	Bluebunch wheatgrass	30
					Mountain big sagebrush	15
					Arrowleaf balsamroot	10
					Nevada bluegrass	5
					Antelope bitterbrush	5
119:						
Samaria	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Arrowleaf balsamroot	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5
120:						
Samaria	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Arrowleaf balsamroot	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5
121:						
Samaria	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass	35
					Basin big sagebrush	15
					Arrowleaf balsamroot	5
					Helianthella	5
					Prairie Junegrass	5
					Western wheatgrass	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
121:						
Pollynot----------------	Loamy 12-16 Artrt/pssp6	1,600	1,200	600	Bluebunch wheatgrass-----------	35
					Basin big sagebrush------------	15
					Utah snowberry-----------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Longleaf hawksbeard------------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
122:						
Samaria-----------------	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass-----------	35
					Basin big sagebrush------------	15
					Arrowleaf balsamroot-----------	5
					Helianthella-------------------	5
					Prairie Junegrass--------------	5
					Western wheatgrass-------------	5
Sterling----------------	Loamy 12-16 Artrt/pssp6	1,500	1,100	800	Bluebunch wheatgrass-----------	35
					Basin big sagebrush------------	15
					Nevada bluegrass---------------	10
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Western wheatgrass-------------	5
123:						
Sterling----------------	Loamy 12-16 Artrt/pssp6	1,500	1,100	800	Bluebunch wheatgrass-----------	35
					Basin big sagebrush------------	15
					Nevada bluegrass---------------	10
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Western wheatgrass-------------	5
126:						
Freedom-----------------	Loamy 8-11 Artrt/pssp6	800	600	300	Bluebunch wheatgrass-----------	40
					Basin big sagebrush------------	15
					Bottlebrush squirreltail-------	5
					Longleaf hawksbeard------------	5
					Miscellaneous shrubs-----------	5

Table 6.--Rangeland Productivity and Characteristic Plant Communities--Continued

Map symbol and soil name	Ecological site	Total dry-weight production: Favorable year	Total dry-weight production: Normal year	Total dry-weight production: Unfavorable year	Characteristic vegetation	Rangeland composition
		Lb/acre	*Lb/acre*	*Lb/acre*		*Pct*
127:						
Tickason----------------	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass-----------	45
					Basin big sagebrush------------	15
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Bottlebrush squirreltail-------	5
128:						
Tickason----------------	Loamy 11-13 Artrt/pssp6	1,200	900	500	Bluebunch wheatgrass-----------	45
					Basin big sagebrush------------	15
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Bottlebrush squirreltail-------	5
132:						
Wursten-----------------	Loamy 12-16 Artrt/pssp6	1,800	1,200	800	Bluebunch wheatgrass-----------	35
					Basin big sagebrush------------	20
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
133:						
Yago--------------------	Stony Loam 16-22 Artrv/pssp6	1,800	1,100	600	Bluebunch wheatgrass-----------	30
					Mountain big sagebrush---------	10
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Snowberry----------------------	5
Manila------------------	Loamy 16-22 Artrv/pssp6 16-22"	2,200	1,700	1,000	Bluebunch wheatgrass-----------	30
					Mountain big sagebrush---------	10
					Columbia needlegrass-----------	5
					Nevada bluegrass---------------	5
					Antelope bitterbrush-----------	5
					Arrowleaf balsamroot-----------	5
					Prairie Junegrass--------------	5
					Slender wheatgrass-------------	5
					Sticky geranium----------------	5

Table 7.--Windbreaks and Environmental Plantings

(Only the soil suited to windbreaks and environmental plantings are listed. Absence of an entry indicates that trees generally do not grow to the given height)

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
1:					
Araveton	---	---	---	---	---
Hades	American plum; skunkbush sumac	Eastern redcedar; Russian olive; Siberian crabapple	Austrian pine; black locust; green ash; ponderosa pine; Scotch pine	---	---
5:					
Arbone	---	---	---	---	---
Hondoho	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
Cedarhill	---	---	---	---	---
6:					
Arbone	---	---	---	---	---
Hondoho	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
Cedarhill	---	---	---	---	---
11:					
Bloor	Common juniper	Arroyo willow; common lilac	Silver buffaloberry	Russian olive	Narrowleaf cottonwood; robusta cottonwood; Siberian elm
Brinnum	---	---	---	---	---
13:					
Bothwell	---	---	---	---	---

Table 7.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
13:					
Hades	American plum; skunkbush sumac	Eastern redcedar; Russian olive; Siberian crabapple	Austrian pine; black locust; green ash; ponderosa pine; Scotch pine	---	---
Justesen	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Blue spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
22:					
Collinston	Amur honeysuckle	Black locust; eastern redcedar; Rocky Mountain juniper; Russian olive	Austrian pine; blue spruce; green ash; Siberian elm	---	---
23:					
Collinston	Amur honeysuckle	Black locust; eastern redcedar; Rocky Mountain juniper; Russian olive	Austrian pine; blue spruce; green ash; Siberian elm	---	---
Kearns	---	---	---	---	---
34:					
Goosenawt	Common lilac; European privet; Tatarian honeysuckle	Rocky Mountain juniper	Scotch pine	Golden willow; honeylocust; idahybrid poplar; Russian olive	---
41:					
Hondoho	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
Hymas	---	---	---	---	---
Pavohroo	---	---	---	---	---

Table 7.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
56:					
Justesen	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Blue spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
57:					
Justesen	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Blue spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
58:					
Justesen	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Blue spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
Ririe	---	---	---	---	---
Buist	---	---	---	---	---
64:					
Lagonot	Common lilac; European privet; Nanking cherry; Tatarian honeysuckle	---	Blue spruce; Norway spruce; Scotch pine	Golden willow; honeylocust; idahybrid poplar	---
69:					
Lanoak	---	---	---	---	---
Hondoho	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
81:					
Neeley	Common lilac; European privet; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Blue spruce; green ash; Scotch pine	Golden willow; idahybrid poplar; Russian olive	---

Table 7.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
112:					
Ririe	---	---	---	---	---
Cedarhill	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
113:					
Ririe	---	---	---	---	---
Hondoho	Common lilac; Rocky Mountain juniper; silver buffaloberry; skunkbush sumac	Austrian pine; black locust; blue spruce; green ash; honeylocust; ponderosa pine	Siberian elm	---	---
119:					
Samaria	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Norway spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
120:					
Samaria	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Norway spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
121:					
Samaria	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Norway spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
Pollynot	Common lilac; Nanking cherry	---	Blue spruce; Scotch pine	Golden willow; Russian olive	---
122:					
Samaria	Common lilac; Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Norway spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---
Sterling	---	---	---	---	---

Table 7.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
128:					
Tickason	Common lilac	American plum	---	Black locust; blue spruce; green ash	Golden willow; Lombardy poplar; plains cottonwood; Scotch pine; Siberian elm
130:					
Toefoot	Nanking cherry; Tatarian honeysuckle	Rocky Mountain juniper	Norway spruce; Scotch pine	Golden willow; honeylocust; Russian olive	---

Table 8a.--Recreational Development (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Araveton------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Hades---------------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.06
2:							
Arbone--------------	75	Not limited		Not limited		Somewhat limited	
						Gravel content	0.22
3:							
Arbone--------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.22
4:							
Arbone--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.22
5:							
Arbone--------------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.22
Hondoho-------------	30	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
						Large stones content	0.03
Cedarhill-----------	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
6:							
Arbone--------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
Hondoho-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Cedarhill-----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
7:							
Bayhook	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
		Salinity	0.13	Salinity	0.13	Salinity	0.13
8:							
Bayhook	55	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
		Salinity	0.13	Salinity	0.13	Salinity	0.13
Ecur	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
9:							
Bingham	90	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.02	Gravel content	0.02	Gravel content	1.00
						Slope	0.12
10:							
Bingham	45	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.02	Gravel content	0.02	Gravel content	1.00
Tirod	35	Not limited		Not limited		Not limited	
11:							
Bloor	50	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	1.00	Salinity	1.00	Salinity	1.00
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Brinnum	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Sodium content	1.00	Depth to saturated zone	1.00
		Sodium content	1.00	Depth to saturated zone	0.99	Sodium content	1.00
		Flooding	1.00	Slow water movement	0.21	Flooding	0.60
		Slow water movement	0.21	Salinity	0.13	Slow water movement	0.21
		Salinity	0.13			Salinity	0.13
12:							
Bothwell	80	Not limited		Not limited		Not limited	
13:							
Bothwell	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hades	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.06
Justesen	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
14:							
Brinnum	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Sodium content	1.00	Depth to saturated zone	1.00
		Sodium content	1.00	Depth to saturated zone	0.99	Sodium content	1.00
		Flooding	1.00	Slow water movement	0.21	Flooding	0.60
		Slow water movement	0.21	Salinity	0.13	Slow water movement	0.21
		Salinity	0.13			Salinity	0.13
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.21	Slow water movement	0.21
		Slow water movement	0.21				
Langless	25	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Sodium content	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	0.94	Flooding	1.00
		Sodium content	1.00	Flooding	0.40	Sodium content	1.00
15:							
Buckboard	80	Not limited		Not limited		Not limited	
16:							
Buist	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
						Large stones content	0.08
17:							
Calpac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.25	Gravel content	0.25	Gravel content	1.00
Ridgecrest	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.84	Gravel content	0.84	Slope	1.00
						Depth to bedrock	0.65
						Large stones content	0.54
18:							
Cedarhill	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
19:							
Cedarhill-----------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
20:							
Cedarhill-----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
21:							
Cedarhill-----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
Lostine-------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
22:							
Collinston----------	85	Not limited		Not limited		Not limited	
23:							
Collinston----------	45	Not limited		Not limited		Very limited	
						Slope	1.00
Kearns--------------	30	Not limited		Not limited		Very limited	
						Slope	1.00
24:							
Copenhagen----------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Large stones content	0.11
Lonigan-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.20
						Gravel content	0.18
Manila--------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
25:							
Darkbull	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Sodium content	1.00	Sodium content	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
		Gravel content	0.08	Gravel content	0.08	Dusty	0.50
Pyrat	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.20	Gravel content	0.20	Dusty	0.50
Ecur	25	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
26:							
DeJarnet	90	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.18	Gravel content	0.18	Gravel content	1.00
27:							
Dumps, mine	100	Not rated		Not rated		Not rated	
28:							
Ecur	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
29:							
Ecur	45	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
						Slope	0.88
Darkbull	30	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
		Gravel content	0.08	Gravel content	0.08	Slope	0.88
						Dusty	0.50
30:							
Elevator	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
31:							
Elevator	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
						Slope	0.12
Jensen	35	Not limited		Not limited		Somewhat limited	
						Slope	0.12
32:							
Elevator	40	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.41
Jensen	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
33:							
Fridlo	75	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
34:							
Goosenawt	75	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Gravel content	0.08	Gravel content	1.00
		Gravel content	0.08				
35:							
Hans	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
36:							
Highcreek	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Sterling	30	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.61	Gravel content	0.61	Gravel content	1.00
		Large stones content	0.08	Large stones content	0.08	Slope	1.00
		Slope	0.01	Slope	0.01	Large stones content	1.00
37:							
Highcreek	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Sterling	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.61	Gravel content	0.61	Slope	1.00
		Large stones content	0.08	Large stones content	0.08	Large stones content	1.00
38:							
Hillfield	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Kucera	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
39:							
Hillfield	65	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Kucera	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
40:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
40:							
Calpac	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.25	Gravel content	0.25	Gravel content	1.00
Lizdale	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
						Large stones content	0.08
41:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Hymas	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
42:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Hymas	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
43:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Ridgecrest	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Hades	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.06

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
44:							
Hutchley------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
						Large stones content	0.16
McCarey-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.95
						Gravel content	0.16
						Large stones content	0.01
Araveton------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
Calpac--------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.25	Gravel content	0.25	Gravel content	1.00
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.84	Gravel content	0.84	Slope	1.00
						Depth to bedrock	0.65
						Large stones content	0.54
46:							
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
Northwater----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Clayburn------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.68
47:							
Hymas---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
47:							
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
48:							
Hymas	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
Povey	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
49:							
Inkom	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40	Flooding	1.00
50:							
Iphil	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Ririe	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Watercanyon	15	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.16	Slope	0.16	Dusty	0.50
51:							
Ireland	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.84	Gravel content	0.84	Slope	1.00
						Depth to bedrock	0.65
						Large stones content	0.54
Calpac	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.25	Gravel content	0.25	Gravel content	1.00
52:							
Jensen	80	Not limited		Not limited		Not limited	
53:							
Jensen	80	Not limited		Not limited		Somewhat limited	
						Slope	0.50

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
54:							
Jensen	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Iphil	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Wursten	25	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.11	Gravel content	0.11	Gravel content	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
						Large stones content	0.01
55:							
Jovine	80	Very limited		Not limited		Not limited	
		Flooding	1.00				
56:							
Justesen	75	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.78
57:							
Justesen	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78
58:							
Justesen	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78
Ririe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Buist	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
						Large stones content	0.08
59:							
Kearns	80	Not limited		Not limited		Not limited	
60:							
Kearns	75	Not limited		Not limited		Somewhat limited	
						Slope	0.12
61:							
Kidman	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
62:							
Kidman	60	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Preston	25	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	1.00

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
63:							
Kucera	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
64:							
Lagonot	90	Very limited		Not limited		Not limited	
		Flooding	1.00				
65:							
Langless	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Sodium content	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	0.94	Flooding	1.00
		Sodium content	1.00	Flooding	0.40	Sodium content	1.00
66:							
Langless	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Sodium content	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	0.94	Flooding	1.00
		Sodium content	1.00	Flooding	0.40	Sodium content	1.00
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.21	Slow water movement	0.21
		Slow water movement	0.21				
67:							
Lanoak	90	Not limited		Not limited		Not limited	
68:							
Lanoak	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
69:							
Lanoak	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
70:							
Logan	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.21	Slow water movement	0.21
		Slow water movement	0.21				
71:							
Lonigan	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.20
						Gravel content	0.18

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
71:							
Lizdale	35	Very limited		Very limited		Very limited	
		Gravel content	1.00	Gravel content	1.00	Gravel content	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
						Large stones content	0.08
72:							
Lostine	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
73:							
Manila	85	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.41
74:							
Manila	45	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.41
Broadhead	30	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.45	Slow water movement	0.45	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.45
75:							
Manila	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
Broadhead	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.45	Slow water movement	0.45	Slow water movement	0.45
76:							
Manila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
Lonigan	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.20
						Gravel content	0.18
77:							
Manila	50	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.41
Obnot	25	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.45	Slow water movement	0.45	Large stones content	1.00
		Large stones content	0.08	Large stones content	0.08	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.45

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
78:							
Manila	45	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Slope	1.00
		Slope	0.01	Slope	0.01	Slow water movement	0.41
Yago	40	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.41	Slow water movement	0.41	Large stones content	1.00
		Large stones content	0.18	Large stones content	0.18	Slope	1.00
		Slope	0.01	Slope	0.01	Gravel content	0.56
						Slow water movement	0.41
79:							
Manila	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
Yago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Large stones content	1.00
		Large stones content	0.18	Large stones content	0.18	Gravel content	0.56
						Slow water movement	0.41
80:							
Mellor	50	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
		Salinity	0.13	Salinity	0.13	Salinity	0.13
Freedom	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
81:							
Neeley	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
82:							
Northwater	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
Pavohroo	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
83:							
Parehat	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Flooding	1.00			Flooding	0.60

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
84:							
Parleys-------------	80	Not limited		Not limited		Not limited	
85:							
Parleys-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
86:							
Parleys-------------	50	Not limited		Not limited		Very limited	
						Slope	1.00
Welby---------------	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Slope	1.00
87:							
Parleys-------------	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Wheelon-------------	15	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
		Slope	0.01	Slope	0.01	Dusty	0.50
88:							
Pavohroo------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Povey---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
89:							
Pavohroo------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Stines--------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.24	Gravel content	0.24	Slope	1.00
						Large stones content	0.08
Lonigan-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.20
						Gravel content	0.18
90:							
Pits, gravel--------	100	Not rated		Not rated		Not rated	
91:							
Povey---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
Hades---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.06

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
91:							
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
92:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.84	Gravel content	0.84	Slope	1.00
						Depth to bedrock	0.65
						Large stones content	0.54
Calpac	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.25	Gravel content	0.25	Gravel content	1.00
93:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.49	Gravel content	0.49	Slope	1.00
						Large stones content	0.11
Pavohroo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
94:							
Povirt	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slow water movement	1.00	Sodium content	1.00	Sodium content	1.00
		Sodium content	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00				
95:							
Raldridge	75	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.08	Gravel content	0.08	Gravel content	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
96:							
Rexburg	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
97:							
Rexburg	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Arbone	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.22

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
97:							
Ririe	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
98:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Arbone	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.22
Ririe	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
99:							
Rexburg	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Iphil	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
100:							
Rexburg	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Lanoak	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
101:							
Rexburg	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lanoak	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
102:							
Rexburg	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Lanoak	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Watercanyon	20	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Dusty	0.50
103:							
Rexburg	50	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Ririe	20	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Kucera	15	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
104:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Thatcher	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ririe	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
105:							
Rexburg	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Lanoak	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
106:							
Ridgecrest	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
107:							
Ridgecrest	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Hymas	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
108:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
Lizdale-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
						Large stones content	0.08
109:							
Ridgecrest----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.68	Gravel content	0.68	Slope	1.00
						Large stones content	0.68
						Depth to bedrock	0.10
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Large stones content	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
110:							
Ririe---------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Buist---------------	25	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.01	Gravel content	0.01	Slope	1.00
		Slope	0.01	Slope	0.01	Gravel content	1.00
						Large stones content	0.08
111:							
Ririe---------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Cedarhill-----------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
112:							
Ririe---------------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
112:							
Cedarhill	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.94
						Large stones content	0.08
113:							
Ririe	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Large stones content	0.03
114:							
Ririe	40	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Iphil	25	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Kucera	20	Not limited		Not limited		Somewhat limited	
						Slope	0.88
115:							
Ririe	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Iphil	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Rexburg	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
116:							
Ririe	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Rexburg	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
117:							
Ririe	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Watercanyon	25	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Dusty	0.50
118:							
Ririe	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
119:							
Samaria	90	Not limited		Not limited		Not limited	
120:							
Samaria	90	Not limited		Not limited		Very limited	
						Slope	1.00
121:							
Samaria	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Pollynot	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
122:							
Samaria	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Sterling	35	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.61	Gravel content	0.61	Gravel content	1.00
		Large stones content	0.08	Large stones content	0.08	Slope	1.00
		Slope	0.01	Slope	0.01	Large stones content	1.00
123:							
Sterling	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.61	Gravel content	0.61	Slope	1.00
		Large stones content	0.08	Large stones content	0.08	Large stones content	1.00
124:							
Thatcher	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
125:							
Thatcher	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Jensen	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
126:							
Freedom	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
127:							
Tickason	80	Not limited		Not limited		Not limited	
128:							
Tickason	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
129:							
Tirod	85	Not limited		Not limited		Not limited	
130:							
Toefoot	90	Not limited		Not limited		Not limited	

Table 8a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
131:							
Welby	65	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
Parleys	20	Not limited		Not limited		Not limited	
132:							
Wursten	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Gravel content	1.00
		Gravel content	0.11	Gravel content	0.11	Slope	1.00
						Large stones content	0.01
133:							
Yago	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Large stones content	1.00
		Large stones content	0.18	Large stones content	0.18	Gravel content	0.56
						Slow water movement	0.41
Manila	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.41	Slow water movement	0.41
134:							
Water	100	Not rated		Not rated		Not rated	

Table 8b.--Recreational Development (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Araveton------------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Hades---------------	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01
2:							
Arbone--------------	75	Not limited		Not limited		Not limited	
3:							
Arbone--------------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.01
4:							
Arbone--------------	85	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
5:							
Arbone--------------	35	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Hondoho-------------	30	Not limited		Not limited		Somewhat limited	
						Gravel content	0.09
						Large stones content	0.03
						Slope	0.01
Cedarhill-----------	20	Not limited		Not limited		Somewhat limited	
						Large stones content	0.08
						Droughty	0.01
						Slope	0.01
6:							
Arbone--------------	45	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
Hondoho-------------	25	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Cedarhill-----------	20	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
						Large stones content	0.08
						Droughty	0.01
7:							
Bayhook-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Salinity	0.13

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
8:							
Bayhook	55	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Salinity	0.13
Ecur	35	Not limited		Not limited		Very limited	
						Sodium content	1.00
9:							
Bingham	90	Not limited		Not limited		Somewhat limited	
						Gravel content	0.02
						Droughty	0.01
10:							
Bingham	45	Not limited		Not limited		Somewhat limited	
						Gravel content	0.02
						Droughty	0.01
Tirod	35	Not limited		Not limited		Not limited	
11:							
Bloor	50	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Salinity	1.00
						Sodium content	1.00
Brinnum	35	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Sodium content	1.00
						Depth to saturated zone	0.99
						Flooding	0.60
						Salinity	0.13
						Droughty	0.01
12:							
Bothwell	80	Not limited		Not limited		Not limited	
13:							
Bothwell	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Hades	30	Somewhat limited		Not limited		Very limited	
		Slope	0.02			Slope	1.00
Justesen	20	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
14:							
Brinnum	30	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Sodium content	1.00
						Depth to saturated zone	0.99
						Flooding	0.60
						Salinity	0.13
						Droughty	0.01
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
14:							
Langless	25	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Sodium content	1.00
						Carbonate content	1.00
						Depth to saturated zone	0.94
15:							
Buckboard	80	Not limited		Not limited		Not limited	
16:							
Buist	75	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Large stones content	0.08
						Gravel content	0.01
17:							
Calpac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.25
						Droughty	0.05
Ridgecrest	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	0.99
						Gravel content	0.84
						Depth to bedrock	0.65
						Large stones content	0.54
18:							
Cedarhill	85	Not limited		Not limited		Somewhat limited	
						Large stones content	0.08
						Droughty	0.01
						Slope	0.01
19:							
Cedarhill	75	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
						Large stones content	0.08
						Droughty	0.01
20:							
Cedarhill	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
						Large stones content	0.08
						Droughty	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
20:							
Hymas---------------	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
21:							
Cedarhill-----------	40	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
						Large stones content	0.08
						Droughty	0.01
Lostine-------------	40	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
22:							
Collinston----------	85	Not limited		Not limited		Not limited	
23:							
Collinston----------	45	Not limited		Not limited		Not limited	
Kearns--------------	30	Not limited		Not limited		Not limited	
24:							
Copenhagen----------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.32	Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	1.00
						Slope	1.00
						Large stones content	0.11
Lonigan-------------	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.32	Slope	1.00
						Depth to bedrock	0.20
Manila--------------	20	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00	Slope	0.32		
25:							
Darkbull------------	40	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.02			Sodium content	1.00
						Gravel content	0.08
Pyrat---------------	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.02			Gravel content	0.20
Ecur----------------	25	Somewhat limited		Not limited		Very limited	
		Slope	0.02			Sodium content	1.00
						Slope	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
26:							
DeJarnet	90	Not limited		Not limited		Somewhat limited	
						Gravel content	0.18
27:							
Dumps, mine	100	Not rated		Not rated		Not rated	
28:							
Ecur	85	Not limited		Not limited		Very limited	
						Sodium content	1.00
29:							
Ecur	45	Not limited		Not limited		Very limited	
						Sodium content	1.00
Darkbull	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Gravel content	0.08
30:							
Elevator	80	Not limited		Not limited		Not limited	
31:							
Elevator	40	Not limited		Not limited		Not limited	
Jensen	35	Not limited		Not limited		Not limited	
32:							
Elevator	40	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Jensen	35	Not limited		Not limited		Somewhat limited	
						Slope	0.01
33:							
Fridlo	75	Not limited		Not limited		Very limited	
						Sodium content	1.00
34:							
Goosenawt	75	Not limited		Not limited		Somewhat limited	
						Gravel content	0.08
35:							
Hans	80	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
36:							
Highcreek	45	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Sterling	30	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.08	Large stones content	0.08	Large stones content	1.00
						Gravel content	0.61
						Droughty	0.16
						Slope	0.01
37:							
Highcreek	40	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
37:							
Sterling------------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.32	Large stones content	0.08	Slope	1.00
		Large stones content	0.08			Large stones content	1.00
						Gravel content	0.61
						Droughty	0.16
38:							
Hillfield-----------	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68	Dusty	0.50		
		Dusty	0.50				
Kucera--------------	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.08				
39:							
Hillfield-----------	65	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	1.00		
		Dusty	0.50	Dusty	0.50		
Kucera--------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	1.00		
40:							
Hondoho-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Calpac--------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.25
						Droughty	0.05
Lizdale-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
41:							
Hondoho-------------	35	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Hymas---------------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.68	Large stones content	0.32	Depth to bedrock	1.00
		Large stones content	0.32			Droughty	1.00
						Large stones content	1.00
						Slope	1.00
						Carbonate content	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
41:							
Pavohroo------------	20	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
42:							
Hondoho-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Hymas---------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
Pavohroo------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
43:							
Hondoho-------------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.32	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Ridgecrest----------	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.32	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Hades---------------	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.32	Slope	1.00
44:							
Hutchley------------	30	Somewhat limited		Not limited		Very limited	
		Slope	0.82			Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
						Large stones content	0.16
						Gravel content	0.01
McCarey-------------	25	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.82			Depth to bedrock	0.95
						Large stones content	0.01
Araveton------------	25	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.82				

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
Calpac--------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.25
						Droughty	0.05
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	0.99
						Gravel content	0.84
						Depth to bedrock	0.65
						Large stones content	0.54
46:							
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
Northwater----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Clayburn------------	20	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
47:							
Hymas---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
Povey---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
48:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
48:							
Povey	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
49:							
Inkom	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
50:							
Iphil	50	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
Ririe	20	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
Watercanyon	15	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.16
		Dusty	0.50	Dusty	0.50		
51:							
Ireland	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	0.99
						Gravel content	0.84
						Depth to bedrock	0.65
						Large stones content	0.54
Calpac	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.25
						Droughty	0.05
52:							
Jensen	80	Not limited		Not limited		Not limited	
53:							
Jensen	80	Not limited		Not limited		Not limited	
54:							
Jensen	30	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.16
Iphil	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Wursten	25	Not limited		Not limited		Somewhat limited	
						Gravel content	0.11
						Large stones content	0.01
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
55:							
Jovine-------------	80	Not limited		Not limited		Not limited	
56:							
Justesen-----------	75	Not limited		Not limited		Somewhat limited	
						Slope	0.01
57:							
Justesen-----------	75	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
58:							
Justesen-----------	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Ririe--------------	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Buist--------------	15	Somewhat limited		Not limited		Very limited	
		Slope	0.02			Slope	1.00
						Large stones content	0.08
						Gravel content	0.01
59:							
Kearns-------------	80	Not limited		Not limited		Not limited	
60:							
Kearns-------------	75	Not limited		Not limited		Not limited	
61:							
Kidman-------------	90	Not limited		Not limited		Not limited	
62:							
Kidman-------------	60	Not limited		Not limited		Not limited	
Preston------------	25	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	0.99
63:							
Kucera-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.01
64:							
Lagonot------------	90	Not limited		Not limited		Not limited	
65:							
Langless-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Flooding	1.00
						Sodium content	1.00
		Flooding	0.40	Flooding	0.40	Carbonate content	1.00
						Depth to saturated zone	0.94

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
66:							
Langless	55	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Sodium content	1.00
						Carbonate content	1.00
						Depth to saturated zone	0.94
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
67:							
Lanoak	90	Not limited		Not limited		Not limited	
68:							
Lanoak	90	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
69:							
Lanoak	45	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.84
Hondoho	35	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
70:							
Logan	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
71:							
Lonigan	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.01	Slope	1.00
						Depth to bedrock	0.20
Lizdale	35	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Gravel content	1.00
						Slope	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
72:							
Lostine	75	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00				
73:							
Manila	85	Not limited		Not limited		Somewhat limited	
						Slope	0.01
74:							
Manila	45	Not limited		Not limited		Somewhat limited	
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
74:							
Broadhead-----------	30	Not limited		Not limited		Somewhat limited	
						Slope	0.01
75:							
Manila--------------	45	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Broadhead-----------	30	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
76:							
Manila--------------	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.92				
Lonigan-------------	30	Somewhat limited		Not limited		Very limited	
		Slope	0.92			Slope	1.00
						Depth to bedrock	0.20
77:							
Manila--------------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Obnot---------------	25	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.08	Large stones content	0.08	Large stones content	1.00
						Slope	0.01
78:							
Manila--------------	45	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Yago----------------	40	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.18	Large stones content	0.18	Large stones content	1.00
						Slope	0.01
79:							
Manila--------------	45	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Yago----------------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.68	Large stones content	0.18	Large stones content	1.00
		Large stones content	0.18			Slope	1.00
80:							
Mellor--------------	50	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Salinity	0.13
Freedom-------------	35	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
81:							
Neeley--------------	90	Not limited		Not limited		Very limited	
						Sodium content	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
82:							
Northwater	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
Pavohroo	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
83:							
Parehat	90	Not limited		Not limited		Very limited	
						Sodium content	1.00
						Flooding	0.60
84:							
Parleys	80	Not limited		Not limited		Not limited	
85:							
Parleys	85	Not limited		Not limited		Not limited	
86:							
Parleys	50	Not limited		Not limited		Not limited	
Welby	35	Not limited		Not limited		Very limited	
						Sodium content	1.00
87:							
Parleys	60	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Wheelon	15	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Slope	0.01
88:							
Pavohroo	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
89:							
Pavohroo	45	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
Stines	30	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Gravel content	0.24
						Large stones content	0.08
						Droughty	0.01
Lonigan	20	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Depth to bedrock	0.20

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
90:							
Pits, gravel	100	Not rated		Not rated		Not rated	
91:							
Povey	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
Hades	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
Hondoho	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
92:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	0.99
						Gravel content	0.84
						Depth to bedrock	0.65
						Large stones content	0.54
Calpac	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.25
						Droughty	0.05
93:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.49
						Large stones content	0.11
Pavohroo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
94:							
Povirt	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Sodium content	1.00
						Ponding	1.00
95:							
Raldridge	75	Not limited		Not limited		Somewhat limited	
						Gravel content	0.08
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
96:							
Rexburg-------------	85	Not limited		Not limited		Not limited	
97:							
Rexburg-------------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Arbone--------------	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Ririe---------------	15	Not limited		Not limited		Somewhat limited	
						Slope	0.01
98:							
Rexburg-------------	40	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				
Arbone--------------	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				
Ririe---------------	15	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				
99:							
Rexburg-------------	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Iphil---------------	25	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Watercanyon---------	25	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68	Dusty	0.50		
		Dusty	0.50				
100:							
Rexburg-------------	55	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Lanoak--------------	35	Not limited		Not limited		Somewhat limited	
						Slope	0.01
101:							
Rexburg-------------	55	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				
Lanoak--------------	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.32				
102:							
Rexburg-------------	35	Not limited		Not limited		Somewhat limited	
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
102:							
Lanoak	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Watercanyon	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.01
103:							
Rexburg	50	Not limited		Not limited		Not limited	
Ririe	20	Not limited		Not limited		Not limited	
Kucera	15	Not limited		Not limited		Not limited	
104:							
Rexburg	40	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Thatcher	25	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
Ririe	20	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
105:							
Rexburg	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Watercanyon	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50		
		Slope	0.02				
Lanoak	20	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
106:							
Ridgecrest	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
107:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Hymas---------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00
108:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
Lizdale-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
109:							
Ridgecrest----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.68
						Large stones content	0.68
						Depth to bedrock	0.10
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Large stones content	0.32	Large stones content	0.32	Slope	1.00
						Droughty	1.00
						Large stones content	1.00
						Carbonate content	1.00

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
110:							
Ririe	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Buist	25	Not limited		Not limited		Somewhat limited	
						Large stones content	0.08
						Gravel content	0.01
						Slope	0.01
111:							
Ririe	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Cedarhill	25	Not limited		Not limited		Somewhat limited	
						Large stones content	0.08
						Droughty	0.01
						Slope	0.01
112:							
Ririe	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Cedarhill	25	Somewhat limited		Not limited		Very limited	
		Slope	0.02			Slope	1.00
						Large stones content	0.08
						Droughty	0.01
113:							
Ririe	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.02				
Hondoho	25	Somewhat limited		Not limited		Very limited	
		Slope	0.02			Slope	1.00
						Gravel content	0.09
						Large stones content	0.03
114:							
Ririe	40	Not limited		Not limited		Not limited	
Iphil	25	Not limited		Not limited		Not limited	
Kucera	20	Not limited		Not limited		Not limited	
115:							
Ririe	30	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Iphil	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Rexburg	25	Not limited		Not limited		Somewhat limited	
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
116:							
Ririe---------------	45	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Rexburg-------------	40	Not limited		Not limited		Somewhat limited	
						Slope	0.01
117:							
Ririe---------------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Watercanyon---------	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.01
118:							
Ririe---------------	45	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
Watercanyon---------	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68	Dusty	0.50		
		Dusty	0.50				
119:							
Samaria-------------	90	Not limited		Not limited		Not limited	
120:							
Samaria-------------	90	Not limited		Not limited		Not limited	
121:							
Samaria-------------	55	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Pollynot------------	30	Not limited		Not limited		Somewhat limited	
						Slope	0.01
122:							
Samaria-------------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.01
Sterling------------	35	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.08	Large stones content	0.08	Large stones content	1.00
						Gravel content	0.61
						Droughty	0.16
						Slope	0.01
123:							
Sterling------------	80	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.08	Large stones content	0.08	Slope	1.00
						Large stones content	1.00
		Slope	0.02				
						Gravel content	0.61
						Droughty	0.16
124:							
Thatcher------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.01

Table 8b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
125:							
Thatcher------------	45	Somewhat limited		Not limited		Very limited	
		Slope	0.68			Slope	1.00
Jensen--------------	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.68				
126:							
Freedom-------------	75	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
127:							
Tickason------------	80	Not limited		Not limited		Not limited	
128:							
Tickason------------	85	Not limited		Not limited		Not limited	
129:							
Tirod---------------	85	Not limited		Not limited		Not limited	
130:							
Toefoot-------------	90	Not limited		Not limited		Not limited	
131:							
Welby---------------	65	Not limited		Not limited		Very limited	
						Sodium content	1.00
Parleys-------------	20	Not limited		Not limited		Not limited	
132:							
Wursten-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.16
						Gravel content	0.11
						Large stones content	0.01
133:							
Yago----------------	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
		Large stones content	0.18	Large stones content	0.18	Large stones content	1.00
Manila--------------	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00	Slope	0.22		
134:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 9a.--Building Site Development (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Araveton	50	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
Hades	25	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
2:							
Arbone	75	Not limited		Not limited		Not limited	
3:							
Arbone	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
4:							
Arbone	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
5:							
Arbone	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Hondoho	30	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Large stones content	0.13	Slope	1.00
		Large stones content	0.13	Slope	0.01	Shrink-swell	0.50
		Slope	0.01			Large stones content	0.13
Cedarhill	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
6:							
Arbone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Cedarhill	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
7:							
Bayhook	90	Not limited		Not limited		Not limited	
8:							
Bayhook	55	Not limited		Not limited		Not limited	
Ecur	35	Not limited		Not limited		Not limited	

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
9:							
Bingham	90	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
10:							
Bingham	45	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
Tirod	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
11:							
Bloor	50	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.03		
Brinnum	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
12:							
Bothwell	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
13:							
Bothwell	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Hades	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Justesen	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
14:							
Brinnum	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Logan	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Langless	25	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
15:							
Buckboard	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
16:							
Buist	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
17:							
Calpac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Large stones content	0.85
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Ridgecrest	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97	Depth to hard bedrock	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Depth to hard bedrock	1.00	Large stones content	1.00
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to hard bedrock	0.64
18:							
Cedarhill	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
19:							
Cedarhill	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
20:							
Cedarhill	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hymas	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
21:							
Cedarhill	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lostine	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
22:							
Collinston	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
23:							
Collinston	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.88
						Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
23:							
Kearns	30	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.88
						Shrink-swell	0.50
24:							
Copenhagen	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
Lonigan	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Manila	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
25:							
Darkbull	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Pyrat	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ecur	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
26:							
DeJarnet	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
27:							
Dumps, mine	100	Not rated		Not rated		Not rated	
28:							
Ecur	85	Not limited		Not limited		Not limited	
29:							
Ecur	45	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Darkbull	30	Not limited		Not limited		Somewhat limited	
						Slope	0.12
30:							
Elevator	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to saturated zone	0.03		
31:							
Elevator	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to saturated zone	0.03		
Jensen	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
32:							
Elevator	40	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Depth to saturated zone	0.03	Shrink-swell	0.50
				Slope	0.01		
Jensen	35	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
33:							
Fridlo	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to saturated zone	0.29		
34:							
Goosenawt	75	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
35:							
Hans	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
36:							
Highcreek	45	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
Sterling	30	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.04	Large stones content	0.04	Slope	1.00
		Slope	0.01	Slope	0.01	Large stones content	0.04
37:							
Highcreek	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Sterling	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.04	Large stones content	0.04	Large stones content	0.04
38:							
Hillfield	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Kucera	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
39:							
Hillfield	65	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Kucera	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
40:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Calpac	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Large stones content	0.85
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Lizdale	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
41:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Hymas	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
42:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Hymas	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
43:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
43:							
Ridgecrest----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97	Slope	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10
Hades---------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
44:							
Hutchley------------	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.55	Large stones content	0.55	Large stones content	0.55
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
McCarey-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.95	Slope	1.00	Depth to hard bedrock	0.95
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Araveton------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
Calpac--------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Large stones content	0.85
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Depth to hard bedrock	1.00	Large stones content	1.00
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to hard bedrock	0.64
46:							
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
46:							
Northwater	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Shrink-swell	0.50		
Clayburn	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
47:							
Hymas	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
48:							
Hymas	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
Povey	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
49:							
Inkom	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
50:							
Iphil	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Ririe	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Watercanyon	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
51:							
Ireland	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Depth to hard bedrock	1.00	Large stones content	1.00
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to hard bedrock	0.64

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51:							
Calpac--------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Large stones content	0.85
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
52:							
Jensen--------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
53:							
Jensen--------------	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
54:							
Jensen--------------	30	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.16	Slope	0.16	Shrink-swell	0.50
Iphil---------------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Wursten-------------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
55:							
Jovine--------------	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.03		
56:							
Justesen------------	75	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
57:							
Justesen------------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
58:							
Justesen------------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Ririe---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Buist---------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
59:							
Kearns--------------	80	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
60:							
Kearns--------------	75	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61:							
Kidman	90	Not limited		Not limited		Not limited	
62:							
Kidman	60	Not limited		Not limited		Not limited	
Preston	25	Not limited		Not limited		Somewhat limited	
						Slope	0.88
63:							
Kucera	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
64:							
Lagonot	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
65:							
Langless	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
66:							
Langless	55	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Logan	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
67:							
Lanoak	90	Not limited		Not limited		Not limited	
68:							
Lanoak	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
69:							
Lanoak	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
		Large stones content	0.13	Large stones content	0.13	Large stones content	0.13
70:							
Logan	95	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
71:							
Lonigan	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Lizdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
72:							
Lostine	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
73:							
Manila	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
74:							
Manila	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
Broadhead	30	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
75:							
Manila	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
Broadhead	30	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
76:							
Manila	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Lonigan	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
77:							
Manila	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
Obnot	25	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00
78:							
Manila	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.01	Slope	0.01	Slope	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
78:							
Yago	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Large stones content	0.98	Large stones content	0.98	Slope	1.00
		Slope	0.01	Slope	0.01	Large stones content	0.98
79:							
Manila	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
Yago	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
		Large stones content	0.98	Large stones content	0.98	Large stones content	0.98
80:							
Mellor	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Freedom	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
81:							
Neeley	90	Not limited		Not limited		Not limited	
82:							
Northwater	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Shrink-swell	0.50		
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
Pavohroo	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
83:							
Parehat	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
84:							
Parleys	80	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
85:							
Parleys	85	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
86:							
Parleys	50	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.88
						Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
86:							
Welby	35	Not limited		Not limited		Somewhat limited	
						Slope	0.88
87:							
Parleys	60	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Slope	0.01	Slope	1.00
		Slope	0.01			Shrink-swell	0.50
Wheelon	15	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.01	Slope	0.01	Shrink-swell	0.50
88:							
Pavohroo	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
89:							
Pavohroo	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Stines	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lonigan	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
90:							
Pits, gravel	100	Not rated		Not rated		Not rated	
91:							
Povey	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
Hades	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
92:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
92:							
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Depth to hard bedrock	1.00	Large stones content	1.00
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to hard bedrock	0.64
Calpac	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Large stones content	0.85
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
93:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.07
Pavohroo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
94:							
Povirt	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
95:							
Raldridge	75	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
96:							
Rexburg	85	Not limited		Not limited		Not limited	
97:							
Rexburg	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Arbone	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Ririe	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
98:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Arbone	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ririe	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
99:							
Rexburg	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
99:							
Iphil	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
100:							
Rexburg	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Lanoak	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
101:							
Rexburg	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lanoak	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
102:							
Rexburg	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Lanoak	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Watercanyon	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
103:							
Rexburg	50	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Ririe	20	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Kucera	15	Not limited		Not limited		Somewhat limited	
						Slope	0.12
104:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Thatcher	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ririe	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
105:							
Rexburg	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lanoak	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
106:							
Ridgecrest----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97	Depth to hard bedrock	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10
Hondoho-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
107:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97	Depth to hard bedrock	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Hymas---------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
108:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97	Depth to hard bedrock	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
Lizdale-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
109:							
Ridgecrest----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97	Depth to hard bedrock	1.00	Large stones content	0.97
		Depth to hard bedrock	0.10	Large stones content	0.97	Depth to hard bedrock	0.10

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
109:							
Hymas	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
110:							
Ririe	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Buist	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
111:							
Ririe	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Cedarhill	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
112:							
Ririe	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Cedarhill	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
113:							
Ririe	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Shrink-swell	0.50
		Large stones content	0.13			Large stones content	0.13
114:							
Ririe	40	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Iphil	25	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Kucera	20	Not limited		Not limited		Somewhat limited	
						Slope	0.12
115:							
Ririe	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Iphil	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Rexburg	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
116:							
Ririe	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
116:							
Rexburg	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
117:							
Ririe	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Watercanyon	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
118:							
Ririe	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
119:							
Samaria	90	Not limited		Not limited		Not limited	
120:							
Samaria	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
121:							
Samaria	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Pollynot	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
122:							
Samaria	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Sterling	35	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.04	Large stones content	0.04	Slope	1.00
		Slope	0.01	Slope	0.01	Large stones content	0.04
123:							
Sterling	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.04	Large stones content	0.04	Large stones content	0.04
124:							
Thatcher	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
125:							
Thatcher	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Jensen	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
126:							
Freedom	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 9a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127:							
Tickason	80	Not limited		Not limited		Not limited	
128:							
Tickason	85	Not limited		Not limited		Not limited	
129:							
Tirod	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
130:							
Toefoot	90	Not limited		Not limited		Not limited	
131:							
Welby	65	Not limited		Not limited		Not limited	
Parleys	20	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
132:							
Wursten	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
133:							
Yago	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Large stones content	0.98	Large stones content	0.98	Large stones content	0.98
Manila	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
134:							
Water	100	Not rated		Not rated		Not rated	

Table 9b.--Building Site Development (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
1:							
Araveton------------	50	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.01
		Shrink-swell	0.50	Slope	0.01		
		Frost action	0.50				
		Slope	0.01				
Hades---------------	25	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.01
		Shrink-swell	0.50	Slope	0.01		
		Frost action	0.50				
		Slope	0.01				
2:							
Arbone--------------	75	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
3:							
Arbone--------------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		
4:							
Arbone--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
5:							
Arbone--------------	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		
Hondoho-------------	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13	Slope	0.01	Slope	0.01
		Slope	0.01				
Cedarhill-----------	20	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
		Slope	0.01	Slope	0.01	Droughty	0.01
						Slope	0.01
6:							
Arbone--------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
Hondoho-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
6:							
Cedarhill-----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	0.08
						Droughty	0.01
7:							
Bayhook-------------	90	Not limited		Somewhat limited		Very limited	
				Cutbanks cave	0.10	Sodium content	1.00
						Salinity	0.13
8:							
Bayhook-------------	55	Not limited		Somewhat limited		Very limited	
				Cutbanks cave	0.10	Sodium content	1.00
						Salinity	0.13
Ecur----------------	35	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Sodium content	1.00
9:							
Bingham-------------	90	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	1.00	Gravel content	0.02
		Frost action	0.50			Droughty	0.01
		Low strength	0.22				
10:							
Bingham-------------	45	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	1.00	Gravel content	0.02
		Frost action	0.50			Droughty	0.01
		Low strength	0.22				
Tirod---------------	35	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
11:							
Bloor---------------	50	Somewhat limited		Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	0.10	Salinity	1.00
				Depth to saturated zone	0.03	Sodium content	1.00
Brinnum-------------	35	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Flooding	1.00	Flooding	0.60	Depth to saturated zone	0.99
		Low strength	1.00	Cutbanks cave	0.10	Flooding	0.60
		Depth to saturated zone	0.99			Salinity	0.13
		Shrink-swell	0.50			Droughty	0.01
12:							
Bothwell------------	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
13:							
Bothwell------------	35	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	1.00				
		Shrink-swell	0.50				
Hades---------------	30	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
Justesen------------	20	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
14:							
Brinnum-------------	30	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Flooding	1.00	Flooding	0.60	Depth to saturated zone	0.99
		Low strength	1.00	Cutbanks cave	0.10	Flooding	0.60
		Depth to saturated zone	0.99			Salinity	0.13
		Shrink-swell	0.50			Droughty	0.01
Logan---------------	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
		Flooding	0.40				
Langless------------	25	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Sodium content	1.00
		Low strength	1.00	Cutbanks cave	0.10	Carbonate content	1.00
		Depth to saturated zone	0.94			Depth to saturated zone	0.94
15:							
Buckboard-----------	80	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
16:							
Buist---------------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
						Gravel content	0.01

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
17:							
Calpac----------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Gravel content	0.25
						Droughty	0.05
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
Ridgecrest------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97			Carbonate content	1.00
				Slope	1.00	Gravel content	0.68
		Frost action	0.50	Large stones content	0.97	Large stones content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Depth to bedrock	0.10
Ireland---------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	1.00			Droughty	0.99
				Slope	1.00	Gravel content	0.84
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to bedrock	0.65
						Large stones content	0.54
		Frost action	0.50	Cutbanks cave	0.10		
18:							
Cedarhill-------------	85	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
		Slope	0.01	Slope	0.01		
						Droughty	0.01
						Slope	0.01
19:							
Cedarhill-------------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	0.08
						Droughty	0.01
20:							
Cedarhill-------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
						Droughty	0.01
Hymas-----------------	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Carbonate content	1.00
21:							
Cedarhill-------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	0.08
						Droughty	0.01

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
21:							
Lostine-------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.22				
22:							
Collinston----------	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
23:							
Collinston----------	45	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
Kearns--------------	30	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
24:							
Copenhagen----------	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
						Large stones content	0.11
Lonigan-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.20
				Depth to soft bedrock	0.20		
Manila--------------	20	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12		
		Slope	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
25:							
Darkbull------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Sodium content	1.00
						Gravel content	0.08
Pyrat---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Gravel content	0.20
Ecur----------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Sodium content	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
26:							
DeJarnet------------	90	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	1.00	Gravel content	0.18
		Frost action	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
27:							
Dumps, mine	100	Not rated		Not rated		Not rated	
28:							
Ecur	85	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Sodium content	1.00
29:							
Ecur	45	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Sodium content	1.00
Darkbull	30	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Sodium content	1.00
						Gravel content	0.08
30:							
Elevator	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00	Depth to saturated zone	0.03		
		Shrink-swell	0.50				
31:							
Elevator	40	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00	Depth to saturated zone	0.03		
		Shrink-swell	0.50				
Jensen	35	Somewhat limited		Very limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	1.00		
		Frost action	0.50				
32:							
Elevator	40	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	1.00	Depth to saturated zone	0.03		
		Shrink-swell	0.50				
		Slope	0.01	Slope	0.01		
Jensen	35	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	1.00	Slope	0.01
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
33:							
Fridlo	75	Very limited		Somewhat limited		Very limited	
		Frost action	1.00	Depth to saturated zone	0.29	Sodium content	1.00
		Low strength	1.00				
		Shrink-swell	0.50	Cutbanks cave	0.10		
34:							
Goosenawt	75	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Gravel content	0.08
		Shrink-swell	0.50				
		Frost action	0.50				
		Flooding	0.40				
35:							
Hans	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
36:							
Highcreek-----------	45	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.01
		Shrink-swell	0.50	Slope	0.01		
		Frost action	0.50				
		Slope	0.01				
Sterling------------	30	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	1.00
		Large stones content	0.04	Large stones content	0.04	Gravel content	0.61
		Slope	0.01	Slope	0.01	Droughty	0.16
						Slope	0.01
37:							
Highcreek-----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Low strength	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
Sterling------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	1.00
		Large stones content	0.04	Large stones content	0.04	Gravel content	0.61
						Droughty	0.16
38:							
Hillfield-----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Kucera--------------	30	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
39:							
Hillfield-----------	65	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Kucera--------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
40:							
Hondoho-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				
Calpac--------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Gravel content	0.25
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	0.05
		Frost action	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
40:							
Lizdale	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
41:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				
Hymas	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
						Carbonate content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
42:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				
Hymas	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Carbonate content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
43:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
43:							
Ridgecrest----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97	Slope	1.00	Carbonate content	1.00
		Frost action	0.50	Large stones content	0.97	Gravel content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Large stones content	0.68
						Depth to bedrock	0.10
Hades---------------	20	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
44:							
Hutchley------------	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	0.55	Large stones content	0.55	Slope	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10	Large stones content	0.16
		Frost action	0.50			Gravel content	0.01
McCarey-------------	25	Very limited		Very limited		Very limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	0.95
		Depth to hard bedrock	0.95	Cutbanks cave	0.10	Large stones content	0.01
		Shrink-swell	0.50				
		Frost action	0.50				
Araveton------------	25	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	1.00
						Carbonate content	1.00
Calpac--------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Gravel content	0.25
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	0.05
		Frost action	0.50				
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	1.00	Slope	1.00	Droughty	0.99
		Depth to hard bedrock	0.64	Large stones content	1.00	Gravel content	0.84
		Frost action	0.50	Cutbanks cave	0.10	Depth to bedrock	0.65
						Large stones content	0.54

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
46:							
Hymas	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	1.00
						Carbonate content	1.00
Northwater	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
Clayburn	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
47:							
Hymas	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	1.00
						Carbonate content	1.00
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
48:							
Hymas	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	1.00
						Carbonate content	1.00
Povey	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
49:							
Inkom	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
50:							
Iphil	50	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
Ririe	20	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
Watercanyon	15	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.16
		Slope	0.16	Slope	0.16		
51:							
Ireland	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	1.00	Slope	1.00	Droughty	0.99
		Depth to hard bedrock	0.64	Large stones content	1.00	Gravel content	0.84
		Frost action	0.50	Cutbanks cave	0.10	Depth to bedrock	0.65
						Large stones content	0.54
Calpac	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Gravel content	0.25
		Shrink-swell	0.50	Cutbanks cave	0.10	Droughty	0.05
		Frost action	0.50				
52:							
Jensen	80	Somewhat limited		Very limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	1.00		
		Frost action	0.50				
53:							
Jensen	80	Somewhat limited		Very limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	1.00		
		Frost action	0.50				
54:							
Jensen	30	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	1.00	Slope	0.16
		Frost action	0.50	Slope	0.16		
		Slope	0.16				
Iphil	25	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Wursten	25	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.11
		Slope	0.01	Slope	0.01	Large stones content	0.01
						Slope	0.01
55:							
Jovine	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00	Depth to saturated zone	0.03		
		Flooding	0.40				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
56:							
Justesen------------	75	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.01
		Shrink-swell	0.50	Slope	0.01		
		Frost action	0.50				
		Slope	0.01				
57:							
Justesen------------	75	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
58:							
Justesen------------	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
Ririe---------------	30	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
Buist---------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	0.08
						Gravel content	0.01
59:							
Kearns--------------	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
60:							
Kearns--------------	75	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
61:							
Kidman--------------	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
62:							
Kidman--------------	60	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
Preston-------------	25	Not limited		Very limited		Very limited	
				Cutbanks cave	1.00	Droughty	0.99
63:							
Kucera--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	0.78	Slope	0.01		
		Slope	0.01				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
64:							
Lagonot	90	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
		Flooding	0.40				
65:							
Langless	85	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Sodium content	1.00
		Low strength	1.00	Cutbanks cave	0.10	Carbonate content	1.00
		Depth to saturated zone	0.94			Depth to saturated zone	0.94
66:							
Langless	55	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Sodium content	1.00
		Low strength	1.00	Cutbanks cave	0.10	Carbonate content	1.00
		Depth to saturated zone	0.94			Depth to saturated zone	0.94
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
		Flooding	0.40				
67:							
Lanoak	90	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
68:							
Lanoak	90	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
69:							
Lanoak	45	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.84	Slope	0.84
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	0.84				
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
70:							
Logan---------------	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
		Flooding	0.40				
71:							
Lonigan-------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.20
				Depth to soft bedrock	0.20		
Lizdale-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Gravel content	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
72:							
Lostine-------------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.22				
73:							
Manila--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.12	Slope	0.01
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
74:							
Manila--------------	45	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.12	Slope	0.01
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
Broadhead-----------	30	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.01
		Shrink-swell	1.00	Too clayey	0.50		
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
75:							
Manila--------------	45	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12		
		Slope	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Broadhead-----------	30	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00		
		Slope	1.00	Too clayey	0.50		
		Frost action	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
76:							
Manila	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12		
		Slope	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Lonigan	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.20
				Depth to soft bedrock	0.20		
77:							
Manila	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.12	Slope	0.01
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
Obnot	25	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Large stones content	1.00
		Shrink-swell	1.00	Too clayey	0.12		
		Frost action	0.50	Slope	0.01	Slope	0.01
		Slope	0.01				
78:							
Manila	45	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.12	Slope	0.01
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Slope	0.01		
		Slope	0.01				
Yago	40	Very limited		Somewhat limited		Very limited	
		Shrink-swell	1.00	Large stones content	0.98	Large stones content	1.00
		Low strength	1.00				
		Large stones content	0.98	Cutbanks cave	0.10	Slope	0.01
				Slope	0.01		
		Frost action	0.50				
		Slope	0.01				
79:							
Manila	45	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12		
		Slope	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Yago	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Slope	1.00	Large stones content	1.00
		Slope	1.00	Large stones content	0.98		
		Low strength	1.00			Slope	1.00
		Large stones content	0.98	Cutbanks cave	0.10		
		Frost action	0.50				
80:							
Mellor	50	Very limited		Somewhat limited		Very limited	
		Frost action	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Low strength	1.00			Salinity	0.13
		Shrink-swell	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
80:							
Freedom	35	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
81:							
Neeley	90	Somewhat limited		Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	0.10	Sodium content	1.00
82:							
Northwater	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
Pavohroo	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
83:							
Parehat	90	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	0.99	Sodium content	1.00
		Flooding	1.00			Flooding	0.60
		Low strength	1.00	Flooding	0.60		
		Shrink-swell	0.50	Cutbanks cave	0.10		
84:							
Parleys	80	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
85:							
Parleys	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
86:							
Parleys	50	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
Welby	35	Somewhat limited		Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	0.10	Sodium content	1.00
87:							
Parleys	60	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	1.00	Slope	0.01		
		Shrink-swell	0.50				
		Slope	0.01				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
87:							
Wheelon-------------	15	Very limited		Somewhat limited		Very limited	
		Frost action	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Low strength	1.00	Slope	0.01	Slope	0.01
		Shrink-swell	0.50				
		Slope	0.01				
88:							
Pavohroo------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
Povey---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
89:							
Pavohroo------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
Stines--------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Gravel content	0.24
						Large stones content	0.08
						Droughty	0.01
Lonigan-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.20
				Depth to soft bedrock	0.20		
90:							
Pits, gravel--------	100	Not rated		Not rated		Not rated	
91:							
Povey---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
Hades---------------	30	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
Hondoho-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
92:							
Povey---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
Ireland-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	1.00			Droughty	0.99
				Slope	1.00	Gravel content	0.84
		Depth to hard bedrock	0.64	Large stones content	1.00	Depth to bedrock	0.65
						Large stones content	0.54
		Frost action	0.50	Cutbanks cave	0.10		
Calpac--------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.85	Large stones content	0.85	Gravel content	0.25
						Droughty	0.05
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
93:							
Povey---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.49
		Large stones content	0.07	Large stones content	0.07	Large stones content	0.11
Pavohroo------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00		
94:							
Povirt--------------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Ponding	1.00	Sodium content	1.00
		Low strength	1.00	Too clayey	0.50	Ponding	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Ponding	1.00				
95:							
Raldridge-----------	75	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.08
		Slope	0.01	Slope	0.01	Slope	0.01
96:							
Rexburg-------------	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.50		
97:							
Rexburg-------------	50	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
Arbone--------------	25	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
97:							
Ririe---------------	15	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
98:							
Rexburg-------------	40	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Arbone--------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
Ririe---------------	15	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
99:							
Rexburg-------------	30	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Iphil---------------	25	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
Watercanyon---------	25	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
100:							
Rexburg-------------	55	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
Lanoak--------------	35	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	1.00	Slope	0.01		
		Slope	0.01				
101:							
Rexburg-------------	55	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Lanoak--------------	35	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
102:							
Rexburg-------------	35	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
Lanoak--------------	25	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	1.00	Slope	0.01		
		Slope	0.01				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
102:							
Watercanyon	20	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
103:							
Rexburg	50	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.50		
Ririe	20	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
Kucera	15	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
104:							
Rexburg	40	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Thatcher	25	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	1.00				
Ririe	20	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
105:							
Rexburg	35	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Watercanyon	30	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
Lanoak	20	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
106:							
Ridgecrest	45	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97	Slope	1.00	Carbonate content	1.00
		Frost action	0.50	Large stones content	0.97	Gravel content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Large stones content	0.68
						Depth to bedrock	0.10
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50	Cutbanks cave	0.10	Large stones content	0.03
		Large stones content	0.13				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
107:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97			Carbonate content	1.00
				Slope	1.00	Gravel content	0.68
		Frost action	0.50	Large stones content	0.97	Large stones content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Depth to bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50			Large stones content	0.03
		Large stones content	0.13	Cutbanks cave	0.10		
Hymas---------------	15	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Carbonate content	1.00
108:							
Ridgecrest----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97			Carbonate content	1.00
				Slope	1.00	Gravel content	0.68
		Frost action	0.50	Large stones content	0.97	Large stones content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Depth to bedrock	0.10
Hondoho-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50			Large stones content	0.03
		Large stones content	0.13	Cutbanks cave	0.10		
Lizdale-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	1.00
						Carbonate content	1.00
						Droughty	0.39
						Large stones content	0.08
109:							
Ridgecrest----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.97			Carbonate content	1.00
				Slope	1.00	Gravel content	0.68
		Frost action	0.50	Large stones content	0.97	Large stones content	0.68
		Depth to hard bedrock	0.10	Cutbanks cave	0.10	Depth to bedrock	0.10

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
109:							
Hymas	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Frost action	0.50	Cutbanks cave	0.10	Carbonate content	1.00
110:							
Ririe	50	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Buist	25	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
		Slope	0.01	Slope	0.01	Gravel content	0.01
						Slope	0.01
111:							
Ririe	50	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Cedarhill	25	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	0.08
		Slope	0.01	Slope	0.01	Droughty	0.01
						Slope	0.01
112:							
Ririe	50	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
Cedarhill	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	0.08
						Droughty	0.01
113:							
Ririe	50	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
Hondoho	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Large stones content	0.13	Gravel content	0.09
		Frost action	0.50			Large stones content	0.03
		Large stones content	0.13	Cutbanks cave	0.10		
114:							
Ririe	40	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
Iphil	25	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
114:							
Kucera--------------	20	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	0.78				
115:							
Ririe---------------	30	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Iphil---------------	25	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Rexburg-------------	25	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
116:							
Ririe---------------	45	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Rexburg-------------	40	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
117:							
Ririe---------------	50	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Slope	0.01	Slope	0.01		
Watercanyon---------	25	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.50	Slope	0.01
		Slope	0.01	Slope	0.01		
118:							
Ririe---------------	45	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
Watercanyon---------	35	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.50		
119:							
Samaria-------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
120:							
Samaria-------------	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
121:							
Samaria-------------	55	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		
Pollynot------------	30	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
122:							
Samaria	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.01
		Slope	0.01	Slope	0.01		
Sterling	35	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00	Large stones content	1.00
		Large stones content	0.04	Large stones content	0.04	Gravel content	0.61
		Slope	0.01	Slope	0.01	Droughty	0.16
						Slope	0.01
123:							
Sterling	80	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones content	1.00
		Large stones content	0.04	Large stones content	0.04	Gravel content	0.61
						Droughty	0.16
124:							
Thatcher	85	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.01
		Low strength	1.00	Slope	0.01		
		Slope	0.01				
125:							
Thatcher	45	Very limited		Very limited		Very limited	
		Frost action	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	1.00				
Jensen	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	0.50	Slope	1.00		
		Frost action	0.50				
126:							
Freedom	75	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
127:							
Tickason	80	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
128:							
Tickason	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
129:							
Tirod	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
130:							
Toefoot	90	Somewhat limited		Very limited		Not limited	
		Low strength	0.78	Cutbanks cave	1.00		
		Frost action	0.50				

Table 9b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
131:							
Welby---------------	65	Somewhat limited		Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	0.10	Sodium content	1.00
Parleys-------------	20	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
132:							
Wursten-------------	85	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.16
		Slope	0.16	Slope	0.16	Gravel content	0.11
						Large stones content	0.01
133:							
Yago----------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Large stones content	0.98	Large stones content	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Large stones content	0.98				
		Frost action	0.50				
Manila--------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
134:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 10a.--Sanitary Facilities (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1:					
Araveton------------	50	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Hades---------------	25	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
2:					
Arbone--------------	75	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
3:					
Arbone--------------	90	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
4:					
Arbone--------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
5:					
Arbone--------------	35	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Hondoho-------------	30	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
		Large stones content	0.13		
		Slope	0.01		
Cedarhill-----------	20	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	1.00
		Slope	0.01		
6:					
Arbone--------------	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
6:					
Hondoho-------------	25	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
Cedarhill-----------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
7:					
Bayhook-------------	90	Very limited		Not limited	
		Slow water movement	1.00		
8:					
Bayhook-------------	55	Very limited		Not limited	
		Slow water movement	1.00		
Ecur----------------	35	Not limited		Very limited	
				Seepage	1.00
9:					
Bingham-------------	90	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.08
10:					
Bingham-------------	45	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
Tirod---------------	35	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
11:					
Bloor---------------	50	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	0.08		
Brinnum-------------	35	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
12:					
Bothwell	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
13:					
Bothwell	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
Hades	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
Justesen	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
14:					
Brinnum	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
Logan	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	0.40
		Flooding	0.40		
Langless	25	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
15:					
Buckboard	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
16:					
Buist	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
17:					
Calpac	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.85	Seepage	0.53
		Slow water movement	0.46		
Ridgecrest	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Ireland	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00
		Slow water movement	0.46	Seepage	0.53
18:					
Cedarhill	85	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	1.00
		Slope	0.01		
19:					
Cedarhill	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
20:					
Cedarhill	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
Hymas	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
21:					
Cedarhill	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
21:					
Lostine	40	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
22:					
Collinston	85	Very limited		Not limited	
		Slow water movement	1.00		
23:					
Collinston	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
Kearns	30	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
24:					
Copenhagen	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.53
Lonigan	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Manila	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
25:					
Darkbull	40	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
Pyrat	30	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
Ecur	25	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
26:					
DeJarnet	90	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
27:					
Dumps, mine	100	Not rated		Not rated	
28:					
Ecur	85	Not limited		Very limited	
				Seepage	1.00
29:					
Ecur	45	Not limited		Very limited	
				Seepage	1.00
				Slope	0.68
Darkbull	30	Somewhat limited		Very limited	
		Slow water movement	0.46	Seepage	1.00
				Slope	0.68
30:					
Elevator	80	Very limited		Not limited	
		Slow water movement	1.00		
		Depth to saturated zone	0.08		
31:					
Elevator	40	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.08
		Depth to saturated zone	0.08		
Jensen	35	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.08
32:					
Elevator	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	0.08		
		Slope	0.01		
Jensen	35	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
33:					
Fridlo	75	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to saturated zone	0.08
		Depth to saturated zone	0.75		
34:					
Goosenawt	75	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
				Flooding	0.40
		Flooding	0.40		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
35:					
Hans----------------	80	Very limited		Not limited	
		Slow water movement	1.00		
36:					
Highcreek-----------	45	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Sterling------------	30	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Large stones content	0.04	Large stones content	0.90
		Slope	0.01	Seepage	0.53
37:					
Highcreek-----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Sterling------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Large stones content	0.90
		Large stones content	0.04	Seepage	0.53
38:					
Hillfield-----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Kucera--------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
39:					
Hillfield-----------	65	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Kucera--------------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
40:					
Hondoho-------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
40:					
Calpac	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.85	Seepage	0.53
		Slow water movement	0.46		
Lizdale	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
41:					
Hondoho	35	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
Hymas	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Pavohroo	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
42:					
Hondoho	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
Hymas	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Pavohroo	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
43:					
Hondoho	35	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
Ridgecrest	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Hades	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
44:					
Hutchley	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.55	Large stones content	0.24
McCarey	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Araveton	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
45:					
Hymas	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Calpac	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.85	Seepage	0.53
		Slow water movement	0.46		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
45:					
Ireland-------------	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00
		Slow water movement	0.46	Seepage	0.53
46:					
Hymas---------------	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Northwater----------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Clayburn------------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
47:					
Hymas---------------	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Povey---------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
48:					
Hymas---------------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
Povey---------------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
48:					
Pavohroo	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
49:					
Inkom	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
50:					
Iphil	50	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Ririe	20	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Watercanyon	15	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.16		
51:					
Ireland	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Large stones content	1.00	Slope	1.00
				Large stones content	1.00
		Slow water movement	0.46		
				Seepage	0.53
Calpac	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.85	Seepage	0.53
		Slow water movement	0.46		
52:					
Jensen	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
53:					
Jensen	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
54:					
Jensen	30	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.16		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
54:					
Iphil---------------	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Wursten-------------	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
55:					
Jovine--------------	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Flooding	0.40
		Flooding	0.40		
		Depth to saturated zone	0.08		
56:					
Justesen------------	75	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	0.01		
57:					
Justesen------------	75	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
58:					
Justesen------------	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
Ririe---------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Buist---------------	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
59:					
Kearns--------------	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
60:					
Kearns--------------	75	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.08

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
61:					
Kidman	90	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
				Slope	0.08
62:					
Kidman	60	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
				Slope	0.32
Preston	25	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage	1.00	Slope	1.00
63:					
Kucera	85	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
64:					
Lagonot	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
65:					
Langless	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
66:					
Langless	55	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
Logan	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	0.40
		Flooding	0.40		
67:					
Lanoak	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
68:					
Lanoak	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
69:					
Lanoak	45	Somewhat limited		Very limited	
		Slope	0.84	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Hondoho	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
		Large stones content	0.13		
70:					
Logan	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	0.40
		Flooding	0.40		
71:					
Lonigan	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Lizdale	35	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
72:					
Lostine	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
73:					
Manila	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
74:					
Manila	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
Broadhead	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
75:					
Manila	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Broadhead	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00		
76:					
Manila	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Lonigan	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
77:					
Manila	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
Obnot	25	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01		
78:					
Manila	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
Yago	40	Very limited		Very limited	
		Slow water movement	1.00	Large stones content	1.00
		Large stones content	0.98	Slope	1.00
		Slope	0.01		
79:					
Manila	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Yago	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Large stones content	1.00
		Large stones content	0.98		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
80:					
Mellor	50	Very limited		Not limited	
		Slow water movement	1.00		
Freedom	35	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
81:					
Neeley	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
82:					
Northwater	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Povey	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
Pavohroo	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
83:					
Parehat	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
84:					
Parleys	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
85:					
Parleys	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
				Slope	0.08
86:					
Parleys	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
Welby	35	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
87:					
Parleys-------------	60	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01	Seepage	0.53
Wheelon-------------	15	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.01		
88:					
Pavohroo------------	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
Povey---------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
89:					
Pavohroo------------	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Stines--------------	30	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Lonigan-------------	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
90:					
Pits, gravel--------	100	Not rated		Not rated	
91:					
Povey---------------	35	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
Hades---------------	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
91:					
Hondoho	25	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
92:					
Povey	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
Ireland	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	1.00
		Slow water movement	0.46	Seepage	0.53
Calpac	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.85	Seepage	0.53
		Slow water movement	0.46		
93:					
Povey	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Large stones content	0.69
		Large stones content	0.07		
Pavohroo	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
94:					
Povirt	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Flooding	0.40
		Flooding	0.40		
95:					
Raldridge	75	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slope	0.01	Slope	1.00

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
96:					
Rexburg------------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.08
97:					
Rexburg------------	50	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Arbone-------------	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Ririe--------------	15	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
98:					
Rexburg------------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Arbone-------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Ririe--------------	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
99:					
Rexburg------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Iphil--------------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Watercanyon---------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
100:					
Rexburg------------	55	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
100:					
Lanoak	35	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
101:					
Rexburg	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Lanoak	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
102:					
Rexburg	35	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Lanoak	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Watercanyon	20	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
103:					
Rexburg	50	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
Ririe	20	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
Kucera	15	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
104:					
Rexburg	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Thatcher	25	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
104:					
Ririe	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
105:					
Rexburg	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Watercanyon	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Lanoak	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
106:					
Ridgecrest	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Hondoho	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
107:					
Ridgecrest	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Hondoho	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
107:					
Hymas---------------	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
108:					
Ridgecrest----------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Hondoho-------------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
Lizdale-------------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
109:					
Ridgecrest----------	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Large stones content	0.97	Large stones content	1.00
		Slow water movement	0.46		
Hymas---------------	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Large stones content	0.94
				Seepage	0.02
110:					
Ririe---------------	50	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Buist---------------	25	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	1.00
		Slope	0.01		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
111:					
Ririe---------------	50	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		
Cedarhill-----------	25	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	1.00
		Slope	0.01		
112:					
Ririe---------------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Cedarhill-----------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
113:					
Ririe---------------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Hondoho-------------	25	Very limited		Very limited	
		Seepage	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Slow water movement	0.46		
		Large stones content	0.13		
114:					
Ririe---------------	40	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
Iphil---------------	25	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
Kucera--------------	20	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Slope	0.68
				Seepage	0.53
115:					
Ririe---------------	30	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.01		

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
115:					
Iphil	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Rexburg	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
116:					
Ririe	45	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Rexburg	40	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
117:					
Ririe	50	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
Watercanyon	25	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
		Slope	0.01	Seepage	0.53
118:					
Ririe	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Watercanyon	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
119:					
Samaria	90	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
120:					
Samaria	90	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.92

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
121:					
Samaria-------------	55	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.01		
Pollynot------------	30	Somewhat limited		Very limited	
		Slow water movement	0.75	Seepage	1.00
				Slope	1.00
		Slope	0.01		
122:					
Samaria-------------	50	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.01		
Sterling------------	35	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Large stones content	0.90
		Large stones content	0.04	Seepage	0.53
		Slope	0.01		
123:					
Sterling------------	80	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Large stones content	0.90
		Large stones content	0.04	Seepage	0.53
124:					
Thatcher------------	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	0.01		
125:					
Thatcher------------	45	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
Jensen--------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
126:					
Freedom-------------	75	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
127:					
Tickason------------	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53

Table 10a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
128:					
Tickason	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.08
129:					
Tirod	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
130:					
Toefoot	90	Somewhat limited		Very limited	
		Slow water movement	0.46	Seepage	1.00
131:					
Welby	65	Very limited		Very limited	
		Seepage	1.00	Seepage	1.00
		Slow water movement	0.46		
Parleys	20	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.53
132:					
Wursten	85	Somewhat limited		Very limited	
		Slow water movement	0.46	Slope	1.00
				Seepage	0.53
		Slope	0.16		
133:					
Yago	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Large stones content	1.00
		Slope	1.00		
		Large stones content	0.98		
Manila	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
134:					
Water	100	Not rated		Not rated	

Table 10b.--Sanitary Facilities (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
1:							
Araveton	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Hades	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.01	Too clayey	0.50
		Slope	0.01			Slope	0.01
2:							
Arbone	75	Not limited		Not limited		Somewhat limited	
						Gravel content	0.06
3:							
Arbone	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Gravel content	0.06
						Slope	0.01
4:							
Arbone	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.06
5:							
Arbone	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Gravel content	0.06
						Slope	0.01
Hondoho	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52	Slope	0.01	Seepage	0.52
		Slope	0.01			Slope	0.01
Cedarhill	20	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16	Slope	0.01	Seepage	0.21
		Slope	0.01			Large stones content	0.16
						Slope	0.01
6:							
Arbone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.12
Hondoho	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6:							
Cedarhill-----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16			Seepage	0.21
						Large stones content	0.16
7:							
Bayhook-------------	90	Not limited		Not limited		Not limited	
8:							
Bayhook-------------	55	Not limited		Not limited		Not limited	
Ecur----------------	35	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
9:							
Bingham-------------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	0.50			Gravel content	0.97
						Too sandy	0.50
10:							
Bingham-------------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	0.50			Gravel content	0.97
						Too sandy	0.50
Tirod---------------	35	Not limited		Not limited		Not limited	
11:							
Bloor---------------	50	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	0.52
		Excess salt	1.00				
Brinnum-------------	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Excess sodium	1.00			Salinity	1.00
		Excess salt	1.00			Too clayey	0.50
		Too clayey	0.50				
12:							
Bothwell------------	80	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
13:							
Bothwell------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Hades---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Justesen------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
14:							
Brinnum	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Excess sodium	1.00			Salinity	1.00
		Excess salt	1.00			Too clayey	0.50
		Too clayey	0.50				
Logan	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
Langless	25	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Carbonate content	1.00
15:							
Buckboard	80	Not limited		Not limited		Not limited	
16:							
Buist	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	1.00
						Seepage	0.22
17:							
Calpac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Gravel content	0.02
Ridgecrest	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Large stones content	0.97
		Large stones content	0.97				
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
18:							
Cedarhill	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16	Slope	0.01	Seepage	0.21
		Slope	0.01			Large stones content	0.16
						Slope	0.01
19:							
Cedarhill	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16			Seepage	0.21
						Large stones content	0.16

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
20:							
Cedarhill	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16			Seepage	0.21
						Large stones content	0.16
Hymas	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
21:							
Cedarhill	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16			Seepage	0.21
						Large stones content	0.16
Lostine	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Slope	1.00
		Slope	1.00				
22:							
Collinston	85	Not limited		Not limited		Not limited	
23:							
Collinston	45	Not limited		Not limited		Not limited	
Kearns	30	Not limited		Not limited		Not limited	
24:							
Copenhagen	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
						Slope	1.00
Lonigan	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
						Gravel content	0.35
Manila	20	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
25:							
Darkbull	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
						Slope	1.00
Pyrat	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Seepage	1.00
		Too sandy	0.50			Gravel content	1.00
						Slope	1.00
						Too sandy	0.50

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
25:							
Ecur	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
26:							
DeJarnet	90	Very limited		Not limited		Very limited	
		Seepage	1.00			Gravel content	1.00
		Too sandy	0.50			Seepage	0.52
						Too sandy	0.50
27:							
Dumps, mine	100	Not rated		Not rated		Not rated	
28:							
Ecur	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
29:							
Ecur	45	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
Darkbull	30	Not limited		Not limited		Very limited	
						Gravel content	1.00
30:							
Elevator	80	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50				
31:							
Elevator	40	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50				
Jensen	35	Not limited		Not limited		Somewhat limited	
						Gravel content	0.16
32:							
Elevator	40	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
						Slope	0.01
		Too clayey	0.50	Slope	0.01		
		Slope	0.01				
Jensen	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Gravel content	0.16
						Slope	0.01
33:							
Fridlo	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Excess sodium	1.00				
34:							
Goosenawt	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Flooding	0.40	Too clayey	0.50
		Flooding	0.40				

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
35:							
Hans	80	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
36:							
Highcreek	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Sterling	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.01	Slope	0.01	Gravel content	0.97
		Slope	0.01			Large stones content	0.01
						Slope	0.01
37:							
Highcreek	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Sterling	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.01			Gravel content	0.97
						Large stones content	0.01
38:							
Hillfield	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Kucera	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
39:							
Hillfield	65	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Kucera	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
40:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
Calpac	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Gravel content	0.02
Lizdale	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
						Gravel content	1.00
						Carbonate content	1.00

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
41:							
Hondoho	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
Hymas	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
42:							
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
Hymas	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
43:							
Hondoho	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
Ridgecrest	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.97
		Large stones content	0.97				
Hades	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
44:							
Hutchley	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.55			Large stones content	0.55
		Too clayey	0.50			Too clayey	0.50

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44:							
McCarey-------------	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Araveton------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
Calpac--------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Gravel content	0.02
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
46:							
Hymas---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
Northwater----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Gravel content	0.70
						Too clayey	0.50
Clayburn------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
47:							
Hymas---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
Povey---------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
48:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Povey	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
Pavohroo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
49:							
Inkom	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
50:							
Iphil	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
Ririe	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
Watercanyon	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Slope	0.16	Slope	0.16
51:							
Ireland	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
Calpac	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Gravel content	0.02
52:							
Jensen	80	Not limited		Not limited		Somewhat limited	
						Gravel content	0.16
53:							
Jensen	80	Not limited		Not limited		Somewhat limited	
						Gravel content	0.16
54:							
Jensen	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Slope	0.16	Slope	0.16
						Gravel content	0.16
Iphil	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Wursten	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Gravel content	0.15
						Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
55:							
Jovine	80	Very limited		Very limited		Not limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Flooding	0.40	Flooding	0.40		
56:							
Justesen	75	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
57:							
Justesen	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
58:							
Justesen	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Ririe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Buist	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Seepage	1.00	Seepage	1.00	Slope	1.00
						Seepage	0.22
59:							
Kearns	80	Not limited		Not limited		Not limited	
60:							
Kearns	75	Not limited		Not limited		Not limited	
61:							
Kidman	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
62:							
Kidman	60	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
Preston	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
63:							
Kucera	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
64:							
Lagonot	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.44
		Flooding	0.40	Flooding	0.40		
65:							
Langless	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Carbonate content	1.00

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
66:							
Langless------------	55	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Carbonate content	1.00
Logan---------------	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
67:							
Lanoak--------------	90	Not limited		Not limited		Not limited	
68:							
Lanoak--------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
69:							
Lanoak--------------	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
Hondoho-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.52			Large stones content	0.52
70:							
Logan---------------	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
71:							
Lonigan-------------	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
						Gravel content	0.35
Lizdale-------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
						Slope	1.00
						Carbonate content	1.00
72:							
Lostine-------------	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00				
73:							
Manila--------------	85	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.01	Too clayey	1.00
		Slope	0.01			Hard to compact	1.00
						Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
74:							
Manila	45	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.01	Too clayey	1.00
		Slope	0.01			Hard to compact	1.00
						Slope	0.01
Broadhead	30	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.01	Too clayey	1.00
		Slope	0.01			Hard to compact	1.00
						Slope	0.01
75:							
Manila	45	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Broadhead	30	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
76:							
Manila	50	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Lonigan	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
						Gravel content	0.35
77:							
Manila	50	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.01	Too clayey	1.00
		Slope	0.01			Hard to compact	1.00
						Slope	0.01
Obnot	25	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Slope	0.01	Hard to compact	1.00
		Slope	0.01			Too clayey	0.50
						Slope	0.01
78:							
Manila	45	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.01	Too clayey	1.00
		Slope	0.01			Hard to compact	1.00
						Slope	0.01
Yago	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.97	Slope	0.01	Large stones content	0.97
		Too clayey	0.50			Too clayey	0.50
		Slope	0.01			Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
79:							
Manila	45	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Yago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97			Large stones content	0.97
		Too clayey	0.50			Too clayey	0.50
80:							
Mellor	50	Not limited		Not limited		Not limited	
Freedom	35	Not limited		Not limited		Not limited	
81:							
Neeley	90	Very limited		Not limited		Very limited	
		Excess sodium	1.00			Sodium content	1.00
82:							
Northwater	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Gravel content	0.70
						Too clayey	0.50
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
Pavohroo	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
83:							
Parehat	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Sodium content	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.47
		Excess sodium	1.00				
84:							
Parleys	80	Not limited		Not limited		Not limited	
85:							
Parleys	85	Not limited		Not limited		Not limited	
86:							
Parleys	50	Not limited		Not limited		Not limited	
Welby	35	Very limited		Very limited		Not limited	
		Seepage	1.00	Seepage	1.00		
87:							
Parleys	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
87:							
Wheelon	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.01	Too clayey	0.50
		Slope	0.01			Slope	0.01
88:							
Pavohroo	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
Povey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
89:							
Pavohroo	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
Stines	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
		Large stones content	0.27			Gravel content	0.32
						Large stones content	0.27
Lonigan	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
						Gravel content	0.35
90:							
Pits, gravel	100	Not rated		Not rated		Not rated	
91:							
Povey	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
Hades	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Hondoho	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
92:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
Ireland	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
Calpac	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Gravel content	0.02
93:							
Povey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.76
		Large stones content	0.07			Seepage	0.52
						Large stones content	0.07
Pavohroo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.03
94:							
Povirt	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Ponding	1.00	Too clayey	1.00
		Excess sodium	1.00	Flooding	0.40	Hard to compact	1.00
		Ponding	1.00			Sodium content	1.00
		Flooding	0.40			Ponding	1.00
95:							
Raldridge	75	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Gravel content	1.00
		Slope	0.01	Slope	0.01	Seepage	0.52
						Slope	0.01
96:							
Rexburg	85	Not limited		Not limited		Not limited	
97:							
Rexburg	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Arbone	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Gravel content	0.06
						Slope	0.01
Ririe	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Arbone	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.06
Ririe	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
99:							
Rexburg	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Iphil	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
100:							
Rexburg	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Lanoak	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
101:							
Rexburg	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lanoak	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
102:							
Rexburg	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Lanoak	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Watercanyon	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
103:							
Rexburg	50	Not limited		Not limited		Not limited	
Ririe	20	Not limited		Not limited		Not limited	
Kucera	15	Not limited		Not limited		Not limited	
104:							
Rexburg	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Thatcher	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
104:							
Ririe	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
105:							
Rexburg	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Lanoak	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
106:							
Ridgecrest	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Large stones content	0.97
		Large stones content	0.97				
Hondoho	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
107:							
Ridgecrest	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Large stones content	0.97
		Large stones content	0.97				
Hondoho	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52
Hymas	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
108:							
Ridgecrest	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Large stones content	0.97
		Large stones content	0.97				
Hondoho	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
108:							
Lizdale	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
						Gravel content	1.00
						Carbonate content	1.00
109:							
Ridgecrest	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Large stones content	0.97
		Large stones content	0.97				
Hymas	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones	1.00			Large stones	1.00
						Carbonate content	1.00
110:							
Ririe	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Buist	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Gravel content	1.00
		Slope	0.01	Slope	0.01	Seepage	0.22
						Slope	0.01
111:							
Ririe	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Cedarhill	25	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16	Slope	0.01	Seepage	0.21
		Slope	0.01			Large stones content	0.16
						Slope	0.01
112:							
Ririe	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Cedarhill	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Gravel content	0.46
		Large stones content	0.16			Seepage	0.21
						Large stones content	0.16
113:							
Ririe	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Hondoho	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.52
		Large stones content	0.52			Seepage	0.52

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
114:							
Ririe	40	Not limited		Not limited		Not limited	
Iphil	25	Not limited		Not limited		Not limited	
Kucera	20	Not limited		Not limited		Not limited	
115:							
Ririe	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Iphil	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Rexburg	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
116:							
Ririe	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Rexburg	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
117:							
Ririe	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
Watercanyon	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01
118:							
Ririe	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Watercanyon	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
119:							
Samaria	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
						Gravel content	0.17
120:							
Samaria	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
						Gravel content	0.17
121:							
Samaria	55	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
		Slope	0.01	Slope	0.01	Gravel content	0.17
						Slope	0.01
Pollynot	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Slope	0.01	Slope	0.01

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
122:							
Samaria-------------	50	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
		Slope	0.01	Slope	0.01	Gravel content	0.17
						Slope	0.01
Sterling------------	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.01	Slope	0.01	Gravel content	0.97
		Slope	0.01			Large stones content	0.01
						Slope	0.01
123:							
Sterling------------	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.01			Gravel content	0.97
						Large stones content	0.01
124:							
Thatcher------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.01	Too clayey	0.50
		Slope	0.01			Slope	0.01
125:							
Thatcher------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Jensen--------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.16
126:							
Freedom-------------	75	Not limited		Not limited		Not limited	
127:							
Tickason------------	80	Not limited		Not limited		Not limited	
128:							
Tickason------------	85	Not limited		Not limited		Not limited	
129:							
Tirod---------------	85	Not limited		Not limited		Not limited	
130:							
Toefoot-------------	90	Not limited		Very limited		Not limited	
				Seepage	1.00		
131:							
Welby---------------	65	Very limited		Very limited		Not limited	
		Seepage	1.00	Seepage	1.00		
Parleys-------------	20	Not limited		Not limited		Not limited	
132:							
Wursten-------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Slope	0.16	Slope	0.16
						Gravel content	0.15

Table 10b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
133:							
Yago	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.97			Large stones content	0.97
		Too clayey	0.50			Too clayey	0.50
Manila	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
134:							
Water	100	Not rated		Not rated		Not rated	

Table 11a.--Construction Materials (Part 1)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The closer the value is to 0, the greater the potential limitation. Values of 0 are absolute limitations based on the soil property criteria used to develop the interpretation. Values closer to 1.0 have less of a limitation. Values of 1.00 indicate absolutely no limitation. Fine-earth fraction and rock fragment limiting features are reported on a weight basis. A brief rating criteria summary and a definition of abbreviations used in the ratings are given at the end of this report. The symbol < means less than; > means more than)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Araveton-----------	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.12
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.97
Hades--------------	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.50
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.97
2:							
Arbone-------------	75	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
3:							
Arbone-------------	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
4:							
Arbone-------------	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
5:							
Arbone-------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
Hondoho------------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
Cedarhill----------	20	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
6:							
Arbone-------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
Hondoho------------	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.00
Cedarhill----------	20	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
7:							
Bayhook------------	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC 4 to 8 dS/m	0.50
						Calcium carbonates 15 to 40 percent	0.80
8:							
Bayhook------------	55	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC 4 to 8 dS/m	0.50
						Calcium carbonates 15 to 40 percent	0.80
Ecur---------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer possible source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.04	Calcium carbonates 15 to 40 percent	0.08
9:							
Bingham------------	90	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Bottom layer possible source	0.12	Rock fragment content	0.03
10:							
Bingham------------	45	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Bottom layer possible source	0.12	Rock fragment content	0.03
Tirod--------------	35	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
11:							
Bloor--------------	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC >8 dS/m	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
11:							
Brinnum	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC >8 dS/m	0.00
						Wetness at 1 to 2.8 feet	0.00
						Calcium carbonates 15 to 40 percent	0.32
12:							
Bothwell	80	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.95
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
13:							
Bothwell	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay 27 to 40 percent	0.95
Hades	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.50
						Rock fragment content	0.97
Justesen	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.68
						Hard to reclaim	0.80
14:							
Brinnum	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC >8 dS/m	0.00
						Wetness at 1 to 2.8 feet	0.00
						Calcium carbonates 15 to 40 percent	0.32
Logan	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Wetness at <1 foot	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
14:							
Langless	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR >13	0.00
						Wetness at 1 to 2.8 feet	0.04
						EC 4 to 8 dS/m	0.50
15:							
Buckboard	80	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
16:							
Buist	75	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
				Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.43			Rock fragment content	0.00
17:							
Calpac	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
Ridgecrest	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78
Ireland	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock 20 to 40 inches	0.42

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
18:							
Cedarhill	85	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
19:							
Cedarhill	75	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
20:							
Cedarhill	45	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
						Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
Hymas	30	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
21:							
Cedarhill	40	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21:							
Lostine------------	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
22:							
Collinston---------	85	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
23:							
Collinston---------	45	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Kearns-------------	30	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
24:							
Copenhagen---------	35	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
				Thickest layer not a source	0.00	Depth to bedrock <20 inches	0.00
		Bottom layer possible source	0.25			Slope >15 percent	0.00
Lonigan------------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
						Depth to bedrock 20 to 40 inches	0.68
Manila-------------	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay >40 percent	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
25:							
Darkbull-----------	40	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.02	Rock fragment content	0.00
						SAR >13	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.97
Pyrat--------------	30	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.07	Rock fragment content	0.00
						Slope >15 percent	0.00
Ecur---------------	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer possible source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.04	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.08
26:							
DeJarnet-----------	90	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.49	Bottom layer possible source	0.08	Rock fragment content	0.00
27:							
Dumps, mine--------	100	Not rated		Not rated		Not rated	
28:							
Ecur---------------	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer possible source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.04	Calcium carbonates 15 to 40 percent	0.08
29:							
Ecur---------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer possible source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.04	Calcium carbonates 15 to 40 percent	0.08

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
29:							
Darkbull-----------	30	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.02	Rock fragment content	0.00
						SAR >13	0.00
						Calcium carbonates 15 to 40 percent	0.97
30:							
Elevator-----------	80	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.95
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
31:							
Elevator-----------	40	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.95
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Jensen-------------	35	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.06	Thickest layer not a source	0.00	Rock fragment content	0.00
32:							
Elevator-----------	40	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.95
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Jensen-------------	35	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.06	Thickest layer not a source	0.00	Rock fragment content	0.00
33:							
Fridlo-------------	75	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	EC 4 to 8 dS/m	0.50
						Clay 27 to 40 percent	0.98

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
34:							
Goosenawt----------	75	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
35:							
Hans---------------	80	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
36:							
Highcreek----------	45	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.88
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.92
Sterling-----------	30	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
37:							
Highcreek----------	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.88
						Hard to reclaim	0.92
Sterling-----------	35	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Thickest layer not a source	0.00	Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
38:							
Hillfield----------	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.97

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
38:							
Kucera	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
39:							
Hillfield	65	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.97
Kucera	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
40:							
Hondoho	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.00
Calpac	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
Lizdale	20	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer possible source	0.04	Slope >15 percent	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.10	Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates >40 percent	0.00
41:							
Hondoho	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
41:							
Hymas--------------	25	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Depth to bedrock <20 inches	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.46
Pavohroo-----------	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.32
42:							
Hondoho------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.00
Hymas--------------	25	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
Pavohroo-----------	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.32
43:							
Hondoho------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.00
Ridgecrest---------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
43:							
Hades	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.50
						Rock fragment content	0.97
44:							
Hutchley	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Depth to bedrock <20 inches	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Slope >15 percent	0.00
						Clay 27 to 40 percent	0.98
McCarey	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Depth to bedrock 20 to 40 inches	0.16
						Rock fragment content	0.88
Araveton	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.12
						Rock fragment content	0.97
45:							
Hymas	35	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
				Thickest layer not a source	0.00	Rock fragment content	0.00
		Bottom layer not a source	0.00			Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
Calpac	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
Ireland	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock 20 to 40 inches	0.42

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
46:							
Hymas	30	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
Northwater	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
Clayburn	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.05
47:							
Hymas	45	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
Povey	30	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00
48:							
Hymas	35	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
Povey	25	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
48:							
Pavohroo-----------	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.32
49:							
Inkom--------------	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Wetness at <1 foot	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.16
50:							
Iphil--------------	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope 12 to 15 percent	0.04
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Ririe--------------	20	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope 12 to 15 percent	0.04
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
Watercanyon--------	15	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope 8 to 12 percent	0.84
						SAR 4 to 13	0.90
51:							
Ireland------------	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock 20 to 40 inches	0.42
Calpac-------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
52:							
Jensen	80	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.06	Thickest layer not a source	0.00	Rock fragment content	0.00
53:							
Jensen	80	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.06	Thickest layer not a source	0.00	Rock fragment content	0.00
54:							
Jensen	30	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.06	Thickest layer not a source	0.00	Rock fragment content	0.00
						Slope 8 to 12 percent	0.84
Iphil	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Wursten	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.40
						Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.92
55:							
Jovine	80	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
56:							
Justesen	75	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.80

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57:							
Justesen-----------	75	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.68
						Hard to reclaim	0.80
58:							
Justesen-----------	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.68
						Hard to reclaim	0.80
Ririe--------------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
Buist--------------	15	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.43	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Rock fragment content	0.00
59:							
Kearns-------------	80	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
60:							
Kearns-------------	75	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
61:							
Kidman-------------	90	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer possible source	0.00		

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
62:							
Kidman	60	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer possible source	0.00		
Preston	25	Poor		Fair		Poor	
		Bottom layer not a source	0.00	Thickest layer possible source	0.31	Sand fraction >85 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.34	SAR 4 to 13	0.98
63:							
Kucera	85	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
64:							
Lagonot	90	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.60
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
						Wetness at 1 to 2.8 feet	0.91
65:							
Langless	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR >13	0.00
						Wetness at 1 to 2.8 feet	0.04
						EC 4 to 8 dS/m	0.50
66:							
Langless	55	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR >13	0.00
						Wetness at 1 to 2.8 feet	0.04
						EC 4 to 8 dS/m	0.50
Logan	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Wetness at <1 foot	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
67:							
Lanoak-------------	90	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
68:							
Lanoak-------------	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
69:							
Lanoak-------------	45	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope 12 to 15 percent	0.16
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Hondoho------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Slope >15 percent	0.00
70:							
Logan--------------	95	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Wetness at <1 foot	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
71:							
Lonigan------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
						Depth to bedrock 20 to 40 inches	0.68
Lizdale------------	35	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer possible source	0.04	Hard to reclaim	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.10	Rock fragment content	0.00
						Calcium carbonates >40 percent	0.00
						Slope >15 percent	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
72:							
Lostine------------	75	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
73:							
Manila-------------	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
74:							
Manila-------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Broadhead----------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.95
75:							
Manila-------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay >40 percent	0.00
Broadhead----------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.95
76:							
Manila-------------	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
76:							
Lonigan	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
						Depth to bedrock 20 to 40 inches	0.68
77:							
Manila	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Obnot	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.12
78:							
Manila	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Yago	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Clay 27 to 40 percent	0.32
79:							
Manila	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay >40 percent	0.00
Yago	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Slope >15 percent	0.00
						Clay 27 to 40 percent	0.32

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
80:							
Mellor	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	EC >8 dS/m	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR >13	0.00
						Calcium carbonates 15 to 40 percent	0.92
Freedom	35	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.46
81:							
Neeley	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
82:							
Northwater	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
Povey	30	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00
Pavohroo	15	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.32
83:							
Parehat	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Wetness at 1 to 2.8 feet	0.89
84:							
Parleys	80	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
85:							
Parleys------------	85	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
86:							
Parleys------------	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Welby--------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
87:							
Parleys------------	60	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Wheelon------------	15	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.46
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.60
						Clay 27 to 40 percent	0.98
88:							
Pavohroo-----------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.32
Povey--------------	30	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00
89:							
Pavohroo-----------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.32

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
89:							
Stines	30	Fair		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Thickest layer possible source	0.12	Thickest layer possible source	0.02	Rock fragment content	0.00
						Slope >15 percent	0.00
Lonigan	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
						Depth to bedrock 20 to 40 inches	0.68
90:							
Pits, gravel	100	Good		Good		Not rated	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
91:							
Povey	35	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Hard to reclaim	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Rock fragment content	0.00
						Slope >15 percent	0.00
Hades	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.50
						Rock fragment content	0.97
Hondoho	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Slope >15 percent	0.00
92:							
Povey	45	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00
Ireland	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock 20 to 40 inches	0.42

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
92:							
Calpac	15	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
93:							
Povey	45	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer possible source	0.03	Slope >15 percent	0.00
		Bottom layer possible source	0.14	Thickest layer possible source	0.04	Hard to reclaim	0.00
						Rock fragment content	0.00
Pavohroo	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.32
94:							
Povirt	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay >40 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Wetness at <1 foot	0.00
						SAR >13	0.00
95:							
Raldridge	75	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
				Thickest layer not a source	0.00	Rock fragment content	0.00
		Bottom layer possible source	0.25			Calcium carbonates 15 to 40 percent	0.92
96:							
Rexburg	85	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
97:							
Rexburg	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
97:							
Arbone	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
Ririe	15	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
98:							
Rexburg	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
Arbone	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.68
						Calcium carbonates 15 to 40 percent	0.97
Ririe	15	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
99:							
Rexburg	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
Iphil	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
99:							
Watercanyon	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
						SAR 4 to 13	0.90
100:							
Rexburg	55	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Lanoak	35	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
101:							
Rexburg	55	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
Lanoak	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
102:							
Rexburg	35	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Lanoak	25	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Watercanyon	20	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.90

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
103:							
Rexburg------------	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Ririe--------------	20	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Kucera-------------	15	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
104:							
Rexburg------------	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
Thatcher-----------	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay 27 to 40 percent	0.95
Ririe--------------	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
105:							
Rexburg------------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
Watercanyon--------	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
						SAR 4 to 13	0.90

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
105:							
Lanoak	20	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
106:							
Ridgecrest	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78
Hondoho	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.00
107:							
Ridgecrest	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78
Hondoho	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.00
Hymas	15	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 inches	0.46

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
108:							
Ridgecrest	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78
Hondoho	30	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Hard to reclaim	0.00
Lizdale	20	Fair		Fair		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer possible source	0.04	Slope >15 percent	0.00
		Bottom layer possible source	0.62	Bottom layer possible source	0.10	Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates >40 percent	0.00
109:							
Ridgecrest	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.01
						Depth to bedrock 20 to 40 inches	0.78
Hymas	30	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
						Depth to bedrock <20 inches	0.00
						Calcium carbonates 15 to 40 percent	0.46
110:							
Ririe	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
110:							
Buist	25	Fair		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.43	Thickest layer not a source	0.00	Rock fragment content	0.00
111:							
Ririe	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Cedarhill	25	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
112:							
Ririe	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
Cedarhill	25	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Bulk density >1.8 in upper 20 inches	0.00
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
113:							
Ririe	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
113:							
Hondoho------------	25	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Slope >15 percent	0.00
						Hard to reclaim	0.00
114:							
Ririe--------------	40	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Iphil--------------	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Kucera-------------	20	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
115:							
Ririe--------------	30	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Iphil--------------	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
Rexburg------------	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
116:							
Ririe--------------	45	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
116:							
Rexburg------------	40	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.80
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
117:							
Ririe--------------	50	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Watercanyon--------	25	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.90
118:							
Ririe--------------	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.22
						Calcium carbonates 15 to 40 percent	0.68
Watercanyon--------	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
						SAR 4 to 13	0.90
119:							
Samaria------------	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.03	SAR 4 to 13	0.22
						Hard to reclaim	0.32
						Calcium carbonates 15 to 40 percent	0.92
120:							
Samaria------------	90	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.03	SAR 4 to 13	0.22
						Hard to reclaim	0.32
						Calcium carbonates 15 to 40 percent	0.92

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
121:							
Samaria	55	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.03	SAR 4 to 13	0.22
						Hard to reclaim	0.32
						Calcium carbonates 15 to 40 percent	0.92
Pollynot	30	Good		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.75	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.92
122:							
Samaria	50	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer possible source	0.03	SAR 4 to 13	0.22
						Hard to reclaim	0.32
						Calcium carbonates 15 to 40 percent	0.92
Sterling	35	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Thickest layer not a source	0.00	Rock fragment content	0.00
						Calcium carbonates 15 to 40 percent	0.68
123:							
Sterling	80	Fair		Poor		Poor	
		Thickest layer possible source	0.12	Bottom layer not a source	0.00	Hard to reclaim	0.00
		Bottom layer possible source	0.25	Thickest layer not a source	0.00	Rock fragment content	0.00
						Slope >15 percent	0.00
						Calcium carbonates 15 to 40 percent	0.68
124:							
Thatcher	85	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.95
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
125:							
Thatcher	45	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay 27 to 40 percent	0.95
Jensen	35	Poor		Poor		Poor	
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer not a source	0.00	Hard to reclaim	0.00
				Thickest layer not a source	0.00	Slope >15 percent	0.00
		Bottom layer possible source	0.06			Rock fragment content	0.00
126:							
Freedom	75	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR 4 to 13	0.22
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.46
127:							
Tickason	80	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
128:							
Tickason	85	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
129:							
Tirod	85	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
130:							
Toefoot	90	Poor		Poor		Good	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00		
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		

Table 11a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class and limiting features	Value	Potential source of sand: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
131:							
Welby	65	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	SAR >13	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Calcium carbonates 15 to 40 percent	0.68
Parleys	20	Poor		Poor		Fair	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Clay 27 to 40 percent	0.98
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00		
132:							
Wursten	85	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Rock fragment content	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	SAR 4 to 13	0.40
						Hard to reclaim	0.68
						Slope 8 to 12 percent	0.84
						Calcium carbonates 15 to 40 percent	0.92
133:							
Yago	40	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Hard to reclaim	0.00
						Rock fragment content	0.00
						Clay 27 to 40 percent	0.32
Manila	35	Poor		Poor		Poor	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope >15 percent	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer not a source	0.00	Clay >40 percent	0.00
134:							
Water	100	Not rated		Not rated		Not rated	

The potential as a source of gravel evaluates the content of coarse fragments more than 0.2 inch in diameter in the bottom layer or in the thickest layer of the soil. The potential as a source of sand evaluates the amount of sand and fine gravel in the thickest layer or in the bottom layer of the soil. The organic soil layers that have a Unified engineering class for peat (PT) are also evaluated. The potential as a source of topsoil evaluates certain soil properties at various depths, including calcium carbonates, percent clay, soil bulk density, percent sand, soil wetness, content of coarse fragments 0.2 to 3 inches in diameter, content of fragments more than 3 inches in diameter, organic matter content (OM), sodium content expressed as the sodium adsorption ratio (SAR), salinity expressed as dS/m of electrical conductivity (EC), depth to bedrock, slope, and soil pH.

Table 11b.--Construction Materials (Part 2)

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
1:					
Araveton-----------	50	Fair		Fair	
		Carbonate content	0.68	Shrink-swell	0.87
		Water erosion	0.99		
Hades--------------	25	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
2:					
Arbone-------------	75	Fair		Good	
		Low organic matter content	0.88		
		Water erosion	0.90		
		Carbonate content	0.97		
3:					
Arbone-------------	90	Fair		Good	
		Low organic matter content	0.88		
		Water erosion	0.90		
		Carbonate content	0.97		
4:					
Arbone-------------	85	Fair		Fair	
		Low organic matter content	0.88	Slope	0.98
		Water erosion	0.90		
		Carbonate content	0.97		
5:					
Arbone-------------	35	Fair		Good	
		Low organic matter content	0.88		
		Water erosion	0.90		
		Carbonate content	0.97		
Hondoho------------	30	Fair		Fair	
		Cobble content	0.48	Cobble content	0.07
		Low organic matter content	0.50		
		Carbonate content	0.80		
		Droughtiness	0.99		
Cedarhill----------	20	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.94
		Droughtiness	0.75		
		Cobble content	0.94		
6:					
Arbone-------------	45	Fair		Fair	
		Low organic matter content	0.88	Slope	0.32
		Carbonate content	0.97		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
6:					
Hondoho-------------	25	Fair		Fair	
		Cobble content	0.48	Cobble content	0.07
		Low organic matter content	0.50	Slope	0.32
		Carbonate content	0.80		
		Droughtiness	0.99		
Cedarhill-----------	20	Fair		Fair	
		Carbonate content	0.68	Slope	0.32
		Droughtiness	0.75	Cobble content	0.94
		Cobble content	0.94		
7:					
Bayhook-------------	90	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Water erosion	0.06		
		Low organic matter content	0.12		
		Carbonate content	0.80		
8:					
Bayhook-------------	55	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Water erosion	0.06		
		Low organic matter content	0.12		
		Carbonate content	0.80		
Ecur----------------	35	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Carbonate content	0.08		
		Low organic matter content	0.88		
9:					
Bingham-------------	90	Fair		Good	
		Carbonate content	0.68		
		Droughtiness	0.68		
10:					
Bingham-------------	45	Fair		Good	
		Carbonate content	0.68		
		Droughtiness	0.68		
Tirod---------------	35	Fair		Fair	
		Low organic matter content	0.88	Low strength	0.22
		Carbonate content	0.92	Shrink-swell	0.87
11:					
Bloor---------------	50	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Salinity	0.00		
		Water erosion	0.68		
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
11:					
Brinnum-------------	35	Poor		Poor	
		Too alkaline	0.00	Low strength	0.00
		Salinity	0.00	Wetness depth	0.00
		Sodium content	0.00	Shrink-swell	0.87
		Carbonate content	0.08		
		Low organic matter content	0.12		
		Water erosion	0.37		
		Droughtiness	0.99		
12:					
Bothwell------------	80	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
		Too clayey	0.95	Shrink-swell	0.87
13:					
Bothwell------------	35	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
		Too clayey	0.95	Shrink-swell	0.87
				Slope	0.98
Hades---------------	30	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.98
Justesen------------	20	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
				Shrink-swell	0.87
				Slope	0.98
14:					
Brinnum-------------	30	Poor		Poor	
		Too alkaline	0.00	Low strength	0.00
		Salinity	0.00	Wetness depth	0.00
		Sodium content	0.00	Shrink-swell	0.87
		Carbonate content	0.08		
		Low organic matter content	0.12		
		Water erosion	0.37		
		Droughtiness	0.99		
Logan---------------	30	Fair		Poor	
		Sodium content	0.22	Wetness depth	0.00
		Too acid	0.50	Low strength	0.00
		Carbonate content	0.68	Shrink-swell	0.87
Langless------------	25	Poor		Poor	
		Carbonate content	0.00	Low strength	0.00
		Sodium content	0.00	Wetness depth	0.04
		Too acid	0.32		
15:					
Buckboard-----------	80	Good		Poor	
				Low strength	0.00
				Shrink-swell	0.98
16:					
Buist---------------	75	Fair		Poor	
		Carbonate content	0.32	Slope	0.00
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
17:					
Calpac--------------	30	Fair		Poor	
		Cobble content	0.06	Slope	0.00
		Droughtiness	0.76	Cobble content	0.00
		Stone content	0.98	Shrink-swell	0.92
Ridgecrest----------	30	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Slope	0.00
		Droughtiness	0.11	Cobble content	0.00
		Depth to bedrock	0.90		
Ireland-------------	25	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Cobble content	0.00	Slope	0.00
		Depth to bedrock	0.35	Cobble content	0.00
		Stone content	0.91	Stone content	0.99
18:					
Cedarhill-----------	85	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.94
		Droughtiness	0.75		
		Cobble content	0.94		
19:					
Cedarhill-----------	75	Fair		Fair	
		Carbonate content	0.68	Slope	0.32
		Droughtiness	0.75	Cobble content	0.94
		Cobble content	0.94		
20:					
Cedarhill-----------	45	Fair		Poor	
		Carbonate content	0.68	Slope	0.00
		Droughtiness	0.75	Cobble content	0.94
		Cobble content	0.94		
Hymas---------------	30	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
21:					
Cedarhill-----------	40	Fair		Fair	
		Carbonate content	0.68	Slope	0.32
		Droughtiness	0.75	Cobble content	0.94
		Cobble content	0.94		
Lostine-------------	40	Fair		Fair	
		Water erosion	0.68	Slope	0.32
				Low strength	0.78
22:					
Collinston----------	85	Fair		Poor	
		Carbonate content	0.08	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.87
		Water erosion	0.90		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
23:					
Collinston----------	45	Fair		Poor	
		Carbonate content	0.08	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.87
		Water erosion	0.90		
Kearns--------------	30	Fair		Fair	
		Low organic matter content	0.88	Low strength	0.78
		Water erosion	0.90		
24:					
Copenhagen----------	35	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00
		Stone content	0.98		
Lonigan-------------	30	Fair		Poor	
		Droughtiness	0.54	Depth to bedrock	0.00
		Carbonate content	0.68	Slope	0.00
		Depth to bedrock	0.79		
		Low organic matter content	0.88		
Manila--------------	20	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Slope	0.00
		Carbonate content	0.97	Shrink-swell	0.57
25:					
Darkbull------------	40	Poor		Fair	
		Too alkaline	0.00	Slope	0.98
		Sodium content	0.00		
		Carbonate content	0.97		
Pyrat---------------	30	Poor		Fair	
		Too alkaline	0.00	Slope	0.98
		Low organic matter content	0.12		
		Carbonate content	0.92		
Ecur----------------	25	Poor		Fair	
		Sodium content	0.00	Slope	0.98
		Too alkaline	0.00		
		Carbonate content	0.08		
		Low organic matter content	0.88		
26:					
DeJarnet------------	90	Fair		Fair	
		Carbonate content	0.97	Shrink-swell	0.87
		Droughtiness	0.98		
27:					
Dumps, mine---------	100	Not rated		Not rated	

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
28:					
Ecur----------------	85	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Carbonate content	0.08		
		Low organic matter content	0.88		
29:					
Ecur----------------	45	Poor		Good	
		Too alkaline	0.00		
		Sodium content	0.00		
		Carbonate content	0.08		
		Low organic matter content	0.88		
Darkbull------------	30	Poor		Good	
		Too alkaline	0.00		
		Sodium content	0.00		
		Carbonate content	0.97		
30:					
Elevator------------	80	Fair		Poor	
		Carbonate content	0.68	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.87
		Water erosion	0.90		
		Too clayey	0.95		
31:					
Elevator------------	40	Fair		Poor	
		Carbonate content	0.68	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.87
		Water erosion	0.90		
		Too clayey	0.95		
Jensen--------------	35	Fair		Fair	
		Water erosion	0.99	Shrink-swell	0.98
32:					
Elevator------------	40	Fair		Poor	
		Carbonate content	0.68	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.87
		Water erosion	0.90		
		Too clayey	0.95		
Jensen--------------	35	Fair		Fair	
		Water erosion	0.99	Shrink-swell	0.98
33:					
Fridlo--------------	75	Poor		Poor	
		Sodium content	0.00	Low strength	0.00
		Carbonate content	0.46	Shrink-swell	0.87
		Salinity	0.50		
		Low organic matter content	0.88		
		Too clayey	0.98		
		Water erosion	0.99		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
34:					
Goosenawt-----------	75	Good		Poor	
				Low strength	0.00
				Shrink-swell	0.98
35:					
Hans----------------	80	Fair		Poor	
		Carbonate content	0.92	Low strength	0.00
		Too clayey	0.98	Shrink-swell	0.87
		Water erosion	0.99		
36:					
Highcreek-----------	45	Fair		Fair	
		Carbonate content	0.92	Shrink-swell	0.87
		Water erosion	0.99		
Sterling------------	30	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.66
		Droughtiness	0.97		
37:					
Highcreek-----------	40	Fair		Fair	
		Carbonate content	0.92	Slope	0.68
		Water erosion	0.99	Shrink-swell	0.87
Sterling------------	35	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.66
		Droughtiness	0.97	Slope	0.68
38:					
Hillfield-----------	50	Fair		Fair	
		Low organic matter content	0.12	Slope	0.32
		Water erosion	0.68		
		Carbonate content	0.80		
Kucera--------------	30	Fair		Fair	
		Water erosion	0.68	Low strength	0.22
				Slope	0.92
39:					
Hillfield-----------	65	Fair		Poor	
		Low organic matter content	0.12	Slope	0.00
		Water erosion	0.68		
		Carbonate content	0.80		
Kucera--------------	20	Fair		Poor	
		Water erosion	0.68	Slope	0.00
				Low strength	0.22
40:					
Hondoho-------------	35	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
40:					
Calpac	20	Fair		Poor	
		Cobble content	0.06	Slope	0.00
		Droughtiness	0.76	Cobble content	0.00
		Stone content	0.98	Shrink-swell	0.92
Lizdale	20	Poor		Poor	
		Carbonate content	0.00	Slope	0.00
		Droughtiness	0.77		
41:					
Hondoho	35	Fair		Fair	
		Cobble content	0.48	Cobble content	0.07
		Low organic matter content	0.50	Slope	0.32
		Carbonate content	0.80		
		Droughtiness	0.99		
Hymas	25	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.32
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Pavohroo	20	Fair		Fair	
		Too acid	0.32	Slope	0.32
42:					
Hondoho	35	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		
Hymas	25	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Pavohroo	20	Fair		Poor	
		Too acid	0.32	Slope	0.00
43:					
Hondoho	35	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		
Ridgecrest	30	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Cobble content	0.00
		Droughtiness	0.11	Slope	0.00
		Depth to bedrock	0.90		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
43:					
Hades---------------	20	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.00
44:					
Hutchley------------	30	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.18
		Stone content	0.27	Shrink-swell	0.87
		Too clayey	0.98	Stone content	0.96
		Cobble content	0.99		
McCarey-------------	25	Fair		Poor	
		Depth to bedrock	0.05	Depth to bedrock	0.00
		Droughtiness	0.49	Low strength	0.00
		Stone content	0.69	Slope	0.18
		Carbonate content	0.92	Shrink-swell	0.87
		Water erosion	0.99	Stone content	0.97
Araveton------------	25	Fair		Fair	
		Carbonate content	0.68	Slope	0.18
		Water erosion	0.99	Shrink-swell	0.87
45:					
Hymas---------------	35	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Calpac--------------	25	Fair		Poor	
		Cobble content	0.06	Slope	0.00
		Droughtiness	0.76	Cobble content	0.00
		Stone content	0.98	Shrink-swell	0.92
Ireland-------------	20	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Cobble content	0.00	Slope	0.00
		Depth to bedrock	0.35	Cobble content	0.00
		Stone content	0.91	Stone content	0.99
46:					
Hymas---------------	30	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Northwater----------	30	Fair		Poor	
		Too acid	0.50	Slope	0.00
		Low organic matter content	0.88	Shrink-swell	0.99
Clayburn------------	20	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
				Slope	0.00
				Shrink-swell	0.96

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
47:					
Hymas---------------	45	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Povey---------------	30	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
48:					
Hymas---------------	35	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
Povey---------------	25	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
Pavohroo------------	20	Fair		Poor	
		Too acid	0.32	Slope	0.00
49:					
Inkom---------------	85	Fair		Poor	
		Carbonate content	0.16	Wetness depth	0.00
		Water erosion	0.90	Low strength	0.00
				Shrink-swell	0.87
50:					
Iphil---------------	50	Fair		Good	
		Water erosion	0.68		
		Carbonate content	0.68		
Ririe---------------	20	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Watercanyon---------	15	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		
51:					
Ireland-------------	40	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Cobble content	0.00	Slope	0.00
		Depth to bedrock	0.35	Cobble content	0.00
		Stone content	0.91	Stone content	0.99

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
51:					
Calpac--------------	35	Fair		Poor	
		Cobble content	0.06	Slope	0.00
		Droughtiness	0.76	Cobble content	0.00
		Stone content	0.98	Shrink-swell	0.92
52:					
Jensen--------------	80	Fair		Fair	
		Water erosion	0.99	Shrink-swell	0.98
53:					
Jensen--------------	80	Fair		Fair	
		Water erosion	0.99	Shrink-swell	0.98
54:					
Jensen--------------	30	Fair		Fair	
		Water erosion	0.99	Shrink-swell	0.98
Iphil---------------	25	Fair		Good	
		Water erosion	0.68		
		Carbonate content	0.68		
Wursten-------------	25	Fair		Good	
		Sodium content	0.40		
		Low organic matter content	0.50		
		Carbonate content	0.92		
55:					
Jovine--------------	80	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
56:					
Justesen------------	75	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
				Shrink-swell	0.87
57:					
Justesen------------	75	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
				Shrink-swell	0.87
				Slope	0.98
58:					
Justesen------------	50	Fair		Poor	
		Water erosion	0.90	Low strength	0.00
				Shrink-swell	0.87
				Slope	0.98
Ririe---------------	30	Fair		Fair	
		Sodium content	0.22	Slope	0.98
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Buist---------------	15	Fair		Fair	
		Carbonate content	0.32	Slope	0.98
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
59:					
Kearns--------------	80	Fair		Fair	
		Low organic matter content	0.88	Low strength	0.78
		Water erosion	0.90		
60:					
Kearns--------------	75	Fair		Fair	
		Low organic matter content	0.88	Low strength	0.78
		Water erosion	0.90		
61:					
Kidman--------------	90	Poor		Good	
		Too alkaline	0.00		
		Carbonate content	0.80		
		Low organic matter content	0.88		
62:					
Kidman--------------	60	Poor		Good	
		Too alkaline	0.00		
		Carbonate content	0.80		
		Low organic matter content	0.88		
Preston-------------	25	Poor		Good	
		Too sandy	0.00		
		Wind erosion	0.00		
		Droughtiness	0.02		
		Low organic matter content	0.88		
		Sodium content	0.97		
63:					
Kucera--------------	85	Fair		Fair	
		Water erosion	0.68	Low strength	0.22
64:					
Lagonot-------------	90	Poor		Poor	
		Too alkaline	0.00	Low strength	0.00
		Sodium content	0.60	Shrink-swell	0.87
		Carbonate content	0.68	Wetness depth	0.91
		Water erosion	0.99		
65:					
Langless------------	85	Poor		Poor	
		Carbonate content	0.00	Low strength	0.00
		Sodium content	0.00	Wetness depth	0.04
		Too acid	0.32		
66:					
Langless------------	55	Poor		Poor	
		Carbonate content	0.00	Low strength	0.00
		Sodium content	0.00	Wetness depth	0.04
		Too acid	0.32		
Logan---------------	30	Fair		Poor	
		Sodium content	0.22	Wetness depth	0.00
		Too acid	0.50	Low strength	0.00
		Carbonate content	0.68	Shrink-swell	0.87

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
67:					
Lanoak--------------	90	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
68:					
Lanoak--------------	90	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.32
69:					
Lanoak--------------	45	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
Hondoho-------------	35	Fair		Fair	
		Cobble content	0.48	Cobble content	0.07
		Low organic matter content	0.50	Shrink-swell	0.87
		Carbonate content	0.80		
70:					
Logan---------------	95	Fair		Poor	
		Sodium content	0.22	Wetness depth	0.00
		Too acid	0.50	Low strength	0.00
		Carbonate content	0.68	Shrink-swell	0.87
71:					
Lonigan-------------	45	Fair		Poor	
		Droughtiness	0.54	Depth to bedrock	0.00
		Carbonate content	0.68	Slope	0.00
		Depth to bedrock	0.79		
		Low organic matter content	0.88		
Lizdale-------------	35	Poor		Fair	
		Carbonate content	0.00	Slope	0.82
		Droughtiness	0.77		
72:					
Lostine-------------	75	Fair		Poor	
		Water erosion	0.68	Slope	0.00
				Low strength	0.78
73:					
Manila--------------	85	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.57
		Carbonate content	0.97		
74:					
Manila--------------	45	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.57
		Carbonate content	0.97		
Broadhead-----------	30	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.12
		Water erosion	0.99		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
75:					
Manila--------------	45	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Slope	0.32
		Carbonate content	0.97	Shrink-swell	0.57
Broadhead-----------	30	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Low organic matter content	0.88	Shrink-swell	0.12
				Slope	0.32
		Water erosion	0.99		
76:					
Manila--------------	50	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Slope	0.08
		Carbonate content	0.97	Shrink-swell	0.57
Lonigan-------------	30	Fair		Poor	
		Droughtiness	0.34	Depth to bedrock	0.00
		Carbonate content	0.68	Slope	0.08
		Depth to bedrock	0.79		
		Low organic matter content	0.88		
77:					
Manila--------------	50	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.57
		Carbonate content	0.97		
Obnot---------------	25	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		No stoniness limitation	0.99	Shrink-swell	0.15
78:					
Manila--------------	45	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.57
		Carbonate content	0.97		
Yago----------------	40	Fair		Poor	
		Cobble content	0.14	Cobble content	0.00
		Too clayey	0.32	Low strength	0.00
		Carbonate content	0.92	Shrink-swell	0.39
79:					
Manila--------------	45	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Slope	0.32
		Carbonate content	0.97	Shrink-swell	0.57
Yago----------------	35	Fair		Poor	
		Cobble content	0.14	Cobble content	0.00
		Too clayey	0.32	Low strength	0.00
		Carbonate content	0.92	Slope	0.32
				Shrink-swell	0.39

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
80:					
Mellor--------------	50	Poor		Poor	
		Sodium content	0.00	Low strength	0.00
		Too alkaline	0.00	Shrink-swell	0.87
		Salinity	0.50		
		Low organic matter content	0.88		
		Carbonate content	0.92		
		Water erosion	0.99		
Freedom-------------	35	Fair		Poor	
		Sodium content	0.22	Low strength	0.00
		Carbonate content	0.46	Shrink-swell	0.87
		Water erosion	0.68		
		Low organic matter content	0.88		
81:					
Neeley--------------	90	Poor		Good	
		Sodium content	0.00		
		Too alkaline	0.00		
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
82:					
Northwater----------	35	Fair		Poor	
		Too acid	0.50	Slope	0.00
		Low organic matter content	0.88	Shrink-swell	0.99
Povey---------------	30	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
Pavohroo------------	15	Fair		Poor	
		Too acid	0.32	Slope	0.00
83:					
Parehat-------------	90	Poor		Poor	
		Sodium content	0.00	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.87
				Wetness depth	0.89
84:					
Parleys-------------	80	Fair		Poor	
		Low organic matter content	0.12	Low strength	0.00
		Carbonate content	0.46		
		Water erosion	0.68		
		Too clayey	0.98		
85:					
Parleys-------------	85	Fair		Poor	
		Low organic matter content	0.12	Low strength	0.00
		Carbonate content	0.46		
		Water erosion	0.68		
		Too clayey	0.98		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
86:					
Parleys	50	Fair		Poor	
		Low organic matter content	0.12	Low strength	0.00
		Carbonate content	0.46		
		Water erosion	0.68		
		Too clayey	0.98		
Welby	35	Poor		Good	
		Sodium content	0.00		
		Carbonate content	0.68		
		Water erosion	0.90		
87:					
Parleys	60	Fair		Poor	
		Low organic matter content	0.12	Low strength	0.00
		Carbonate content	0.46		
		Water erosion	0.68		
		Too clayey	0.98		
Wheelon	15	Fair		Poor	
		Carbonate content	0.46	Low strength	0.00
		Sodium content	0.60	Shrink-swell	0.87
		Water erosion	0.90		
		Too clayey	0.98		
88:					
Pavohroo	45	Fair		Poor	
		Too acid	0.32	Slope	0.00
Povey	30	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
89:					
Pavohroo	45	Fair		Poor	
		Too acid	0.32	Slope	0.00
Stines	30	Fair		Poor	
		Droughtiness	0.61	Slope	0.00
		Low organic matter content	0.88	Cobble content	0.83
		Cobble content	0.96		
		Stone content	0.99		
Lonigan	20	Fair		Poor	
		Droughtiness	0.54	Depth to bedrock	0.00
		Carbonate content	0.68	Slope	0.00
		Depth to bedrock	0.79		
		Low organic matter content	0.88		
90:					
Pits, gravel	100	Not rated		Not rated	
91:					
Povey	35	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
91:					
Hades---------------	30	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.00
Hondoho-------------	25	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		
92:					
Povey---------------	45	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
Ireland-------------	25	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Cobble content	0.00	Slope	0.00
		Depth to bedrock	0.35	Cobble content	0.00
		Stone content	0.91	Stone content	0.99
Calpac--------------	15	Fair		Poor	
		Cobble content	0.06	Slope	0.00
		Droughtiness	0.76	Cobble content	0.00
		Stone content	0.98	Shrink-swell	0.92
93:					
Povey---------------	45	Fair		Poor	
		Cobble content	0.96	Slope	0.00
				Cobble content	0.26
Pavohroo------------	30	Fair		Poor	
		Too acid	0.32	Slope	0.00
94:					
Povirt--------------	85	Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00
		Low organic matter content	0.88	Low strength	0.00
		Water erosion	0.90	Shrink-swell	0.12
95:					
Raldridge-----------	75	Fair		Good	
		Low organic matter content	0.88		
		Carbonate content	0.92		
		Droughtiness	0.98		
		Water erosion	0.99		
96:					
Rexburg-------------	85	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
97:					
Rexburg-------------	50	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
Arbone--------------	25	Fair		Good	
		Low organic matter content	0.88		
		Water erosion	0.90		
		Carbonate content	0.97		
Ririe---------------	15	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
98:					
Rexburg-------------	40	Fair		Fair	
		Water erosion	0.37	Slope	0.68
		Carbonate content	0.80		
		Low organic matter content	0.88		
Arbone--------------	35	Fair		Fair	
		Low organic matter content	0.88	Slope	0.68
		Water erosion	0.90		
		Carbonate content	0.97		
Ririe---------------	15	Fair		Fair	
		Sodium content	0.22	Slope	0.68
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
99:					
Rexburg-------------	30	Fair		Fair	
		Water erosion	0.37	Slope	0.32
		Carbonate content	0.80		
		Low organic matter content	0.88		
Iphil---------------	25	Fair		Fair	
		Water erosion	0.68	Slope	0.32
		Carbonate content	0.68		
Watercanyon---------	25	Fair		Fair	
		Water erosion	0.37	Slope	0.32
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
100:					
Rexburg-------------	55	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
Lanoak--------------	35	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
101:					
Rexburg-------------	55	Fair		Fair	
		Water erosion	0.37	Slope	0.68
		Carbonate content	0.80		
		Low organic matter content	0.88		
Lanoak--------------	35	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.68
102:					
Rexburg-------------	35	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
Lanoak--------------	25	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
Watercanyon---------	20	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		
103:					
Rexburg-------------	50	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
Ririe---------------	20	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Kucera--------------	15	Fair		Fair	
		Water erosion	0.68	Low strength	0.22
104:					
Rexburg-------------	40	Fair		Fair	
		Water erosion	0.37	Slope	0.32
		Carbonate content	0.80		
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
104:					
Thatcher-----------	25	Fair		Poor	
		Water erosion	0.68	Low strength	0.00
		Carbonate content	0.92	Slope	0.32
		Too clayey	0.95		
Ririe--------------	20	Fair		Fair	
		Sodium content	0.22	Slope	0.32
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
105:					
Rexburg------------	35	Fair		Fair	
		Water erosion	0.37	Slope	0.98
		Carbonate content	0.80		
		Low organic matter content	0.88		
Watercanyon---------	30	Fair		Fair	
		Water erosion	0.37	Slope	0.98
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		
Lanoak-------------	20	Fair		Poor	
		Water erosion	0.99	Low strength	0.00
				Slope	0.98
106:					
Ridgecrest----------	45	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Slope	0.00
		Droughtiness	0.11	Cobble content	0.00
		Depth to bedrock	0.90		
Hondoho------------	35	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		
107:					
Ridgecrest----------	35	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Slope	0.00
		Droughtiness	0.11	Cobble content	0.00
		Depth to bedrock	0.90		
Hondoho------------	30	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
107:					
Hymas	15	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
108:					
Ridgecrest	35	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Slope	0.00
		Droughtiness	0.11	Cobble content	0.00
		Depth to bedrock	0.90		
Hondoho	30	Fair		Poor	
		Cobble content	0.48	Slope	0.00
		Low organic matter content	0.50	Cobble content	0.07
		Carbonate content	0.80		
		Droughtiness	0.99		
Lizdale	20	Poor		Poor	
		Carbonate content	0.00	Slope	0.00
		Droughtiness	0.77		
109:					
Ridgecrest	45	Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00
		Cobble content	0.03	Slope	0.00
		Droughtiness	0.11	Cobble content	0.00
		Depth to bedrock	0.90		
Hymas	30	Poor		Poor	
		Droughtiness	0.00	Depth to bedrock	0.00
		Carbonate content	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.46
		Cobble content	0.01	Stone content	0.99
		Stone content	0.50		
110:					
Ririe	50	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Buist	25	Fair		Good	
		Carbonate content	0.32		
		Low organic matter content	0.88		
111:					
Ririe	50	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
111:					
Cedarhill-----------	25	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.94
		Droughtiness	0.75		
		Cobble content	0.94		
112:					
Ririe---------------	50	Fair		Fair	
		Sodium content	0.22	Slope	0.98
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Cedarhill-----------	25	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.94
		Droughtiness	0.75	Slope	0.98
		Cobble content	0.94		
113:					
Ririe---------------	50	Fair		Fair	
		Sodium content	0.22	Slope	0.98
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Hondoho-------------	25	Fair		Fair	
		Cobble content	0.48	Cobble content	0.07
		Low organic matter content	0.50	Slope	0.98
		Carbonate content	0.80		
		Droughtiness	0.99		
114:					
Ririe---------------	40	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Iphil---------------	25	Fair		Good	
		Water erosion	0.68		
		Carbonate content	0.68		
Kucera--------------	20	Fair		Fair	
		Water erosion	0.68	Low strength	0.22
115:					
Ririe---------------	30	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Iphil---------------	25	Fair		Good	
		Water erosion	0.68		
		Carbonate content	0.68		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
115:					
Rexburg-------------	25	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
116:					
Ririe---------------	45	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Rexburg-------------	40	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.80		
		Low organic matter content	0.88		
117:					
Ririe---------------	50	Fair		Good	
		Sodium content	0.22		
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Watercanyon---------	25	Fair		Good	
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		
118:					
Ririe---------------	45	Fair		Fair	
		Sodium content	0.22	Slope	0.32
		Water erosion	0.37		
		Carbonate content	0.68		
		Low organic matter content	0.88		
Watercanyon---------	35	Fair		Fair	
		Water erosion	0.37	Slope	0.32
		Carbonate content	0.68		
		Low organic matter content	0.88		
		Sodium content	0.90		
119:					
Samaria-------------	90	Fair		Good	
		Low organic matter content	0.12		
		Sodium content	0.22		
		Carbonate content	0.32		
		Water erosion	0.90		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
120:					
Samaria------------	90	Fair		Good	
		Low organic matter content	0.12		
		Sodium content	0.22		
		Carbonate content	0.32		
		Water erosion	0.90		
121:					
Samaria------------	55	Fair		Good	
		Low organic matter content	0.12		
		Sodium content	0.22		
		Carbonate content	0.32		
		Water erosion	0.90		
Pollynot-----------	30	Fair		Good	
		Carbonate content	0.68		
		Water erosion	0.99		
122:					
Samaria------------	50	Fair		Good	
		Low organic matter content	0.12		
		Sodium content	0.22		
		Carbonate content	0.32		
		Water erosion	0.90		
Sterling-----------	35	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.66
		Droughtiness	0.97		
123:					
Sterling-----------	80	Fair		Fair	
		Carbonate content	0.68	Cobble content	0.66
		Droughtiness	0.97	Slope	0.98
124:					
Thatcher-----------	85	Fair		Poor	
		Water erosion	0.68	Low strength	0.00
		Carbonate content	0.92		
		Too clayey	0.95		
125:					
Thatcher-----------	45	Fair		Poor	
		Water erosion	0.68	Low strength	0.00
		Carbonate content	0.92	Slope	0.32
		Too clayey	0.95		
Jensen-------------	35	Fair		Fair	
		Water erosion	0.99	Slope	0.32
				Shrink-swell	0.98
126:					
Freedom------------	75	Fair		Poor	
		Sodium content	0.22	Low strength	0.00
		Carbonate content	0.46	Shrink-swell	0.87
		Water erosion	0.68		
		Low organic matter content	0.88		

Table 11b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value
127:					
Tickason------------	80	Fair		Good	
		Carbonate content	0.92		
128:					
Tickason------------	85	Fair		Good	
		Carbonate content	0.92		
129:					
Tirod---------------	85	Fair		Fair	
		Low organic matter content	0.88	Low strength	0.22
		Carbonate content	0.92	Shrink-swell	0.87
130:					
Toefoot-------------	90	Fair		Good	
		Water erosion	0.90		
131:					
Welby---------------	65	Poor		Good	
		Sodium content	0.00		
		Carbonate content	0.68		
		Water erosion	0.90		
Parleys-------------	20	Fair		Poor	
		Low organic matter content	0.12	Low strength	0.00
		Carbonate content	0.46		
		Water erosion	0.68		
		Too clayey	0.98		
132:					
Wursten-------------	85	Fair		Good	
		Sodium content	0.40		
		Low organic matter content	0.50		
		Carbonate content	0.92		
133:					
Yago----------------	40	Fair		Poor	
		Cobble content	0.14	Cobble content	0.00
		Too clayey	0.32	Slope	0.00
		Carbonate content	0.92	Low strength	0.00
				Shrink-swell	0.39
Manila--------------	35	Poor		Poor	
		Too clayey	0.00	Low strength	0.00
		Water erosion	0.90	Slope	0.00
		Carbonate content	0.97	Shrink-swell	0.57
134:					
Water---------------	100	Not rated		Not rated	

Table 12.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1:							
Araveton	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.60	Depth to water	1.00
Hades	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
2:							
Arbone	75	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
3:							
Arbone	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
4:							
Arbone	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
5:							
Arbone	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Hondoho	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
Cedarhill	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
6:							
Arbone	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Hondoho	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.15				
Cedarhill	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.15				
7:							
Bayhook	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
8:							
Bayhook	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
Ecur	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.04		

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Bingham	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
10:							
Bingham	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
Tirod	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.29	Depth to water	1.00
11:							
Bloor	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Salinity	1.00		
Brinnum	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Depth to saturated zone	1.00	Salinity and saturated zone	1.00
				Salinity	1.00	Slow refill	0.96
				Piping	1.00	Cutbanks cave	0.10
12:							
Bothwell	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
13:							
Bothwell	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
		Slope	0.04				
Hades	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
		Slope	0.04				
Justesen	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.31	Depth to water	1.00
		Slope	0.04				
14:							
Brinnum	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Depth to saturated zone	1.00	Salinity and saturated zone	1.00
				Salinity	1.00	Slow refill	0.96
				Piping	1.00	Cutbanks cave	0.10
Logan	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	1.00	Slow refill	0.96
						Cutbanks cave	0.10
				Piping	1.00		
Langless	25	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
						Cutbanks cave	0.10
				Piping	1.00	Salinity and saturated zone	0.06
15:							
Buckboard	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.54	Piping	0.59	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
16:							
Buist---------------	75	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.50	Depth to water	1.00
		Slope	0.28				
17:							
Calpac--------------	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.85	Depth to water	1.00
		Seepage	0.72	Seepage	0.31		
Ridgecrest----------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Slope	1.00	Thin layer	0.70		
		Depth to bedrock	0.69	Seepage	0.25		
Ireland-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Depth to water	1.00
		Depth to bedrock	0.69	Thin layer	0.91		
		Seepage	0.72				
18:							
Cedarhill-----------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
19:							
Cedarhill-----------	75	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.15				
20:							
Cedarhill-----------	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.82				
Hymas---------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.82	Large stones content	1.00		
		Seepage	0.19	Seepage	0.25		
21:							
Cedarhill-----------	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.15				
Lostine-------------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	0.99	Depth to water	1.00
		Slope	0.15				
22:							
Collinston----------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.28	Depth to water	1.00
23:							
Collinston----------	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.28	Depth to water	1.00
Kearns--------------	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.86	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24:							
Copenhagen----------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.55	Seepage	0.25		
Lonigan-------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	0.55				
		Depth to bedrock	0.06				
Manila--------------	20	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.55				
25:							
Darkbull------------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.04	Seepage	0.62		
Pyrat---------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00
		Slope	0.04				
Ecur----------------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.04	Seepage	0.04		
26:							
DeJarnet------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00
27:							
Dumps, mine---------	100	Not rated		Not rated		Not rated	
28:							
Ecur----------------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.04		
29:							
Ecur----------------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.04		
Darkbull------------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.62		
30:							
Elevator------------	80	Somewhat limited		Not limited		Very limited	
		Seepage	0.02			Depth to water	1.00
31:							
Elevator------------	40	Somewhat limited		Not limited		Very limited	
		Seepage	0.02			Depth to water	1.00
Jensen--------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
32:							
Elevator------------	40	Somewhat limited		Not limited		Very limited	
		Seepage	0.02			Depth to water	1.00
Jensen--------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
33:							
Fridlo--------------	75	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Piping	1.00	Depth to saturated zone	0.98
				Salinity	0.50	Slow refill	0.96
						Salinity and saturated zone	0.78
						Cutbanks cave	0.10
34:							
Goosenawt-----------	75	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.28	Depth to water	1.00
35:							
Hans----------------	80	Not limited		Somewhat limited		Very limited	
				Piping	0.01	Depth to water	1.00
36:							
Highcreek-----------	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.52	Depth to water	1.00
Sterling------------	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.25	Depth to water	1.00
				Large stones content	0.04		
37:							
Highcreek-----------	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.52	Depth to water	1.00
		Slope	0.10				
Sterling------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.25	Depth to water	1.00
		Slope	0.10	Large stones content	0.04		
38:							
Hillfield-----------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Kucera--------------	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.06				
39:							
Hillfield-----------	65	Somewhat limited		Very limited		Very limited	
		Slope	0.88	Piping	1.00	Depth to water	1.00
		Seepage	0.72				
Kucera--------------	20	Somewhat limited		Very limited		Very limited	
		Slope	0.88	Piping	1.00	Depth to water	1.00
		Seepage	0.72				

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
40:							
Hondoho	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	1.00				
Calpac	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.85	Depth to water	1.00
		Seepage	0.72	Seepage	0.31		
Lizdale	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00
		Slope	1.00				
41:							
Hondoho	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.15				
Hymas	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Seepage	0.19	Large stones content	1.00		
		Slope	0.15	Seepage	0.25		
Pavohroo	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.71	Depth to water	1.00
		Slope	0.15				
42:							
Hondoho	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.97				
Hymas	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Large stones content	1.00		
		Seepage	0.19	Seepage	0.25		
Pavohroo	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.71	Depth to water	1.00
		Seepage	0.72				
43:							
Hondoho	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.55				
Ridgecrest	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Depth to bedrock	0.69	Thin layer	0.70		
		Slope	0.55	Seepage	0.25		
Hades	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
		Slope	0.55				

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
44:							
Hutchley------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.18	Large stones content	0.55		
McCarey-------------	25	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.99	Thin layer	0.99	Depth to water	1.00
		Slope	0.18	Piping	0.45		
		Seepage	0.04				
Araveton------------	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.60	Depth to water	1.00
		Slope	0.18				
45:							
Hymas---------------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Large stones content	1.00		
		Seepage	0.19				
				Seepage	0.25		
Calpac--------------	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.85	Depth to water	1.00
		Seepage	0.72				
				Seepage	0.31		
Ireland-------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Depth to water	1.00
		Depth to bedrock	0.91				
		Seepage	0.72	Thin layer	0.91		
46:							
Hymas---------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.88	Large stones content	1.00		
		Seepage	0.19				
				Seepage	0.25		
Northwater----------	30	Somewhat limited		Not limited		Very limited	
		Slope	0.88			Depth to water	1.00
		Seepage	0.72				
Clayburn------------	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.88	Piping	0.20	Depth to water	1.00
		Seepage	0.72				
47:							
Hymas---------------	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Large stones content	1.00		
		Seepage	0.19				
				Seepage	0.25		
Povey---------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.97	Large stones content	0.07		

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Hymas	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Large stones content	1.00		
		Seepage	0.19	Seepage	0.25		
Povey	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	1.00	Large stones content	0.07		
Pavohroo	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.71	Depth to water	1.00
		Seepage	0.72				
49:							
Inkom	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
						Cutbanks cave	0.10
				Piping	0.59		
50:							
Iphil	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.02				
Ririe	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.02				
Watercanyon	15	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
51:							
Ireland	40	Somewhat limited		Very limited		Very limited	
		Slope	0.97	Large stones content	1.00	Depth to water	1.00
		Depth to bedrock	0.91				
		Seepage	0.72	Thin layer	0.91		
Calpac	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Large stones content	0.85	Depth to water	1.00
		Seepage	0.72				
				Seepage	0.31		
52:							
Jensen	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
53:							
Jensen	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
54:							
Jensen	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
Iphil	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Wursten	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
55:							
Jovine----------	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.98	Depth to water	1.00
56:							
Justesen----------	75	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.31	Depth to water	1.00
57:							
Justesen----------	75	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.31	Depth to water	1.00
		Slope	0.04				
58:							
Justesen----------	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.31	Depth to water	1.00
		Slope	0.04				
Ririe----------	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
Buist----------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.50	Depth to water	1.00
		Slope	0.04				
59:							
Kearns----------	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.86	Depth to water	1.00
60:							
Kearns----------	75	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.86	Depth to water	1.00
61:							
Kidman----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.10	Depth to water	1.00
				Seepage	0.01		
62:							
Kidman----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.10	Depth to water	1.00
				Seepage	0.01		
Preston----------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.34	Depth to water	1.00
				Piping	0.02		
63:							
Kucera----------	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
64:							
Lagonot----------	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Piping	1.00	Slow refill	0.28
				Depth to saturated zone	0.84	Cutbanks cave	0.10
						Depth to saturated zone	0.07

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
65:							
Langless------------	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
						Cutbanks cave	0.10
				Piping	1.00	Salinity and saturated zone	0.06
66:							
Langless------------	55	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
						Cutbanks cave	0.10
				Piping	1.00	Salinity and saturated zone	0.06
Logan---------------	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	1.00	Slow refill	0.96
						Cutbanks cave	0.10
				Piping	1.00		
67:							
Lanoak--------------	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
68:							
Lanoak--------------	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.15				
69:							
Lanoak--------------	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.01				
Hondoho-------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Large stones content	0.13	Depth to water	1.00
		Slope	0.03				
70:							
Logan---------------	95	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	1.00	Slow refill	0.96
						Cutbanks cave	0.10
				Piping	1.00		
71:							
Lonigan-------------	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	0.32				
		Depth to bedrock	0.06				
Lizdale-------------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00
		Slope	0.08				
72:							
Lostine-------------	75	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	0.99	Depth to water	1.00
		Slope	0.28				
73:							
Manila--------------	85	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
74:							
Manila	45	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
Broadhead	30	Not limited		Somewhat limited		Very limited	
				Hard to pack	0.40	Depth to water	1.00
75:							
Manila	45	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.15				
Broadhead	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.15	Hard to pack	0.40	Depth to water	1.00
76:							
Manila	50	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.21				
Lonigan	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	0.21				
		Depth to bedrock	0.06				
77:							
Manila	50	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
Obnot	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Hard to pack	0.35	Depth to water	1.00
78:							
Manila	45	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
Yago	40	Not limited		Somewhat limited		Very limited	
				Large stones content	0.98	Depth to water	1.00
79:							
Manila	45	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.15				
Yago	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.15	Large stones content	0.98	Depth to water	1.00
80:							
Mellor	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Salinity	0.50		
Freedom	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
81:							
Neeley	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
82:							
Northwater----------	35	Somewhat limited		Not limited		Very limited	
		Slope	0.97			Depth to water	1.00
		Seepage	0.72				
Povey---------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.97	Large stones content	0.07		
Pavohroo------------	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.71	Depth to water	1.00
		Seepage	0.72				
83:							
Parehat-------------	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Piping	1.00	Slow refill	0.28
				Depth to saturated zone	0.86	Cutbanks cave	0.10
						Depth to saturated zone	0.06
84:							
Parleys-------------	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.15	Depth to water	1.00
85:							
Parleys-------------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.15	Depth to water	1.00
86:							
Parleys-------------	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.15	Depth to water	1.00
Welby---------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
87:							
Parleys-------------	60	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.15	Depth to water	1.00
Wheelon-------------	15	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
88:							
Pavohroo------------	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.71	Depth to water	1.00
		Seepage	0.72				
Povey---------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.97	Large stones content	0.07		
89:							
Pavohroo------------	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.71	Depth to water	1.00
		Slope	0.28				
Stines--------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.28				

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
89:							
Lonigan-------------	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	0.28				
		Depth to bedrock	0.06				
90:							
Pits, gravel--------	100	Not rated		Not rated		Not rated	
91:							
Povey---------------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.50	Large stones content	0.07		
Hades---------------	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
		Slope	0.50				
Hondoho-------------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.50				
92:							
Povey---------------	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	1.00	Large stones content	0.07		
Ireland-------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Depth to water	1.00
		Depth to bedrock	0.91				
		Seepage	0.72	Thin layer	0.91		
Calpac--------------	15	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.85	Depth to water	1.00
		Seepage	0.72				
				Seepage	0.31		
93:							
Povey---------------	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.97	Large stones content	0.07		
Pavohroo------------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.71	Depth to water	1.00
		Seepage	0.72				
94:							
Povirt--------------	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
						Cutbanks cave	0.10
				Hard to pack	1.00		
				Ponding	1.00		
95:							
Raldridge-----------	75	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
96:							
Rexburg	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
97:							
Rexburg	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Arbone	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Ririe	15	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
98:							
Rexburg	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
Arbone	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
Ririe	15	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
99:							
Rexburg	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Iphil	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Watercanyon	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
100:							
Rexburg	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Lanoak	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
101:							
Rexburg	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
Lanoak	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.10				
102:							
Rexburg	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
102:							
Lanoak	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
Watercanyon	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
103:							
Rexburg	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Ririe	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Kucera	15	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
104:							
Rexburg	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Thatcher	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.21	Depth to water	1.00
		Slope	0.15				
Ririe	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
105:							
Rexburg	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
Watercanyon	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
Lanoak	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.04				
106:							
Ridgecrest	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Slope	0.97				
		Depth to bedrock	0.69	Thin layer	0.70		
				Seepage	0.25		
Hondoho	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.97				
107:							
Ridgecrest	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Slope	0.97				
		Depth to bedrock	0.69	Thin layer	0.70		
				Seepage	0.25		

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
107:							
Hondoho-------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.97				
Hymas---------------	15	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Large stones content	1.00		
		Seepage	0.19	Seepage	0.25		
108:							
Ridgecrest----------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Slope	0.97	Thin layer	0.70		
		Depth to bedrock	0.69	Seepage	0.25		
Hondoho-------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.97				
Lizdale-------------	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00
		Slope	0.97				
109:							
Ridgecrest----------	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.97	Depth to water	1.00
		Slope	0.97	Thin layer	0.70		
		Depth to bedrock	0.69	Seepage	0.25		
Hymas---------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Large stones content	1.00		
		Seepage	0.19	Seepage	0.25		
110:							
Ririe---------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Buist---------------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.50	Depth to water	1.00
111:							
Ririe---------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Cedarhill-----------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
112:							
Ririe---------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
Cedarhill-----------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
		Slope	0.04				

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
113:							
Ririe---------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.04				
Hondoho-------------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.13	Depth to water	1.00
		Slope	0.04				
114:							
Ririe---------------	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Iphil---------------	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Kucera--------------	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
115:							
Ririe---------------	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Iphil---------------	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Rexburg-------------	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
116:							
Ririe---------------	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Rexburg-------------	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
117:							
Ririe---------------	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Watercanyon---------	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
118:							
Ririe---------------	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
Watercanyon---------	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.15				
119:							
Samaria-------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.78	Depth to water	1.00
				Seepage	0.03		
120:							
Samaria-------------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.78	Depth to water	1.00
				Seepage	0.03		

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
121:							
Samaria-------------	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.78	Depth to water	1.00
				Seepage	0.03		
Pollynot------------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	0.99	Depth to water	1.00
				Seepage	0.75		
122:							
Samaria-------------	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.78	Depth to water	1.00
				Seepage	0.03		
Sterling------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.25	Depth to water	1.00
				Large stones content	0.04		
123:							
Sterling------------	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.25	Depth to water	1.00
		Slope	0.04	Large stones content	0.04		
124:							
Thatcher------------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.21	Depth to water	1.00
125:							
Thatcher------------	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.21	Depth to water	1.00
		Slope	0.15				
Jensen--------------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
		Slope	0.15				
126:							
Freedom-------------	75	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
127:							
Tickason------------	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
128:							
Tickason------------	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
129:							
Tirod---------------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.29	Depth to water	1.00
130:							
Toefoot-------------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
131:							
Welby---------------	65	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00

Table 12.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
131:							
Parleys-------------	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.15	Depth to water	1.00
132:							
Wursten-------------	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
133:							
Yago----------------	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.98	Depth to water	1.00
Manila--------------	35	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.50				
134:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 13.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1:												
Araveton--------	0-8	Silt loam	CL	A-4, A-6	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	8-36	Silt loam, loam	CL	A-6	0	0-10	85-95	80-95	75-90	75-85	31-44	12-18
	36-62	Gravelly loam	CL	A-6	0-5	10-30	65-75	60-70	55-65	50-60	30-38	12-17
Hades-----------	0-20	Silt loam	CL	A-6	0	0	75-100	75-100	60-95	50-85	29-41	12-17
	20-42	Silty clay loam	CL	A-7	0	0	100	95-100	80-95	75-85	39-49	19-25
	42-60	Gravelly silty clay loam	CL, GC	A-7	0	10-20	65-75	60-75	50-60	45-55	36-45	18-25
2:												
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12
3:												
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12
4:												
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12
5:												
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
5:												
Hondoho---------	0-14	Gravelly silt loam	CL, GC, GC-GM, SC, SC-SM	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC, GC-GM	A-4, A-6, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	SC-SM, GC-GM, GM	A-2, A-1	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GC-GM, GP-GC	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
6:												
Arbone----------	0-15	Silt loam	CL	A-4	0	0	75-85	70-85	60-70	50-60	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
6:												
Hondoho---------	0-14	Gravelly silt loam	CL, GC, GC-GM, SC, SC-SM	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC, GC-GM	A-6, A-4, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	SC-SM, GC-GM, GM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Very gravelly loam, gravelly silt loam, gravelly loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
7:												
Bayhook---------	0-7	Silt loam	CL-ML	A-4	0	0	100	100	95-100	90-100	18-33	2-12
	7-13	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	21-32	6-13
	13-60	Silt loam	CL-ML	A-4	0	0	100	95-100	90-100	85-100	16-29	2-11
8:												
Bayhook---------	0-7	Silt loam	CL-ML	A-4	0	0	100	100	95-100	90-100	18-33	2-12
	7-13	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	21-32	6-13
	13-60	Silt loam	CL-ML	A-4	0	0	100	95-100	90-100	85-100	16-29	2-11

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
8:												
Ecur------------	0-15	Fine sandy loam	SC	A-2, A-4	0	0	100	90-100	80-100	30-50	21-30	6-11
	15-37	Fine sandy loam, loam	SC	A-2, A-4	0	0	90-100	80-100	75-95	30-60	21-30	6-11
	37-44	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
	44-49	Loamy fine sand, gravelly loamy fine sand	SM	A-2	0	0	60-100	60-100	55-100	20-30	15-21	1-4
	49-60	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
9:												
Bingham---------	0-6	Gravelly loam	CL, CL-ML, ML	A-4	0	0	75-85	70-75	60-70	55-65	25-39	6-13
	6-27	Gravelly loam	CL	A-6	0	0-10	75-85	70-75	60-70	55-65	31-43	12-17
	27-38	Very gravelly sandy loam	GC	A-1, A-2	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	38-45	Very gravelly loamy sand	GC-GM, GM	A-1	0	0-10	25-55	20-40	15-35	10-25	17-24	2-6
	45-65	Very gravelly loamy sand, very gravelly loamy coarse sand	GC-GM, GM	A-1	0	0-10	25-55	20-40	15-35	10-25	17-24	2-6
10:												
Bingham---------	0-6	Gravelly loam	CL, CL-ML, ML	A-4	0	0	75-85	70-75	60-70	55-65	25-39	6-13
	6-27	Gravelly loam	CL	A-6	0	0-10	75-85	70-75	60-70	55-65	31-43	12-17
	27-38	Very gravelly sandy loam	GC	A-2, A-1	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	38-45	Very gravelly loamy sand	GC-GM	A-1	0	0-10	25-55	20-40	15-35	10-25	17-24	2-6
	45-65	Very gravelly loamy sand, very gravelly loamy coarse sand	GC-GM, GM	A-1	0	0-10	25-55	20-40	15-35	10-25	17-24	2-6
Tirod-----------	0-18	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	80-90	33-47	12-19
	18-30	Loam	CL	A-6	0	0	90-100	85-100	80-90	75-85	33-47	12-19
	30-40	Clay loam, loam	CL	A-6, A-7	0	0	90-100	85-95	75-85	65-75	34-51	15-25
	40-62	Loam	CL	A-6	0	0	80-90	75-90	60-80	50-75	32-40	13-19

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
11:												
Bloor-----------	0-12	Silt loam	CL	A-4	0	0	100	100	85-100	70-90	22-35	6-13
	12-20	Silty clay loam, clay loam, silt loam	CL	A-6	0	0	100	100	95-100	75-95	32-39	15-19
	20-29	Silt loam, very fine sandy loam, fine sandy loam	CL	A-4	0	0	100	100	85-100	75-90	20-27	6-10
	29-47	Very fine sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0	90-100	80-100	80-95	35-65	16-28	1-10
	47-60	Silt loam	CL	A-4	0	0	80-100	75-100	60-95	45-75	20-32	6-13
Brinnum---------	0-9	Silt loam	CL	A-6	0	0	100	100	90-100	80-95	30-40	12-19
	9-31	Silt loam	CL	A-6	0	0	100	100	95-100	80-95	30-40	12-19
	31-60	Silt loam, silty clay loam	CL	A-7, A-6	0	0	100	100	95-100	75-95	29-46	12-25
12:												
Bothwell--------	0-9	Silt loam	ML	A-4, A-6	0	0	100	95-100	90-100	90-100	34-43	10-15
	9-20	Silt loam, silty clay loam	CL	A-7, A-6	0	0	100	95-100	90-100	90-100	34-51	15-25
	20-45	Silty clay loam	CL	A-6, A-7	0	0	100	95-100	90-100	90-100	38-49	19-25
	45-60	Silt loam, silty clay loam	CL	A-6	0	0	100	90-100	85-100	75-100	30-47	12-25
13:												
Bothwell--------	0-9	Silt loam	ML	A-6, A-4	0	0	100	95-100	90-100	90-100	34-43	10-15
	9-20	Silt loam, silty clay loam	CL	A-7, A-6	0	0	100	95-100	90-100	90-100	34-51	15-25
	20-45	Silty clay loam	CL	A-7, A-6	0	0	100	95-100	90-100	90-100	38-49	19-25
	45-60	Silt loam, silty clay loam	CL	A-6	0	0	100	90-100	85-100	75-100	30-47	12-25
Hades-----------	0-20	Silt loam	CL	A-6	0	0	75-100	75-100	60-95	50-85	29-41	12-17
	20-42	Silty clay loam	CL	A-7	0	0	100	95-100	80-95	75-85	39-49	19-25
	42-60	Gravelly silty clay loam	CL, GC	A-6, A-7	0	10-20	65-75	60-75	50-60	45-55	36-45	18-25

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
13:												
Justesen--------	0-8	Silt loam	CL-ML, CL	A-4	0	0	90-100	79-100	70-97	56-80	26-39	7-13
	8-16	Silt loam, silty clay loam	CL	A-6, A-7	0	0	85-100	70-100	66-100	57-92	36-50	16-24
	16-27	Silty clay loam	CL	A-7	0	0	91-100	80-100	76-100	67-91	39-49	19-25
	27-45	Silt loam	CL	A-6	0	0	91-100	80-100	73-98	62-85	33-45	13-19
	45-60	Gravelly loam	SC, CL	A-6	0	0	72-84	59-84	51-77	37-57	30-38	12-17
14:												
Brinnum---------	0-9	Silt loam	CL	A-6	0	0	100	100	90-100	80-95	30-40	12-19
	9-31	Silt loam	CL	A-6	0	0	100	100	95-100	80-95	30-40	12-19
	31-60	Silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	75-95	29-46	12-25
Logan-----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	4-22	Silt loam	ML	A-7	0	0	100	100	90-100	75-95	41-55	15-18
	22-64	Silt loam	CL	A-6	0	0	100	100	95-100	85-95	31-42	12-19
Langless--------	0-3	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	3-9	Silt loam	ML, CL-ML	A-4	0	0	100	100	85-90	80-90	28-37	7-10
	9-47	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	27-35	9-12
	47-63	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	26-37	9-17
15:												
Buckboard-------	0-15	Loam	CL	A-6	0	0	100	95-100	70-90	60-80	31-42	11-16
	15-50	Loam, silt loam	CL	A-6	0	0	100	95-100	75-95	65-85	31-47	12-19
	50-65	Loam, silt loam	CL	A-6	0	0	100	90-100	65-85	55-75	29-38	12-16
16:												
Buist-----------	0-15	Gravelly silt loam	GC, CL	A-4	0-5	0-10	70-85	65-80	60-75	45-65	24-31	8-12
	15-28	Very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0	45-70	35-60	30-55	20-50	27-39	10-15
	28-60	Extremely gravelly fine sandy loam	GM	A-1	0	10-30	15-30	10-25	5-25	5-20	17-24	2-6

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
17:												
Calpac----------	0-8	Gravelly silt loam	GM, SM	A-4	0	0-5	55-80	50-80	40-60	35-45	27-40	6-12
	8-15	Very gravelly silt loam	GC, GM	A-2, A-4	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	15-23	Extremely cobbly silt loam	GC	A-2	0-15	45-60	30-50	25-45	25-35	20-35	31-43	12-17
	23-60	Extremely cobbly silt loam, extremely cobbly loam	GC	A-2	0-15	55-65	25-50	20-45	20-25	20-25	31-41	12-17
Ridgecrest------	0-9	Very gravelly silt loam	GC, GC-GM	A-4, A-2	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly loam, very cobbly silt loam	GC, GC-GM	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	SC, GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---
Ireland---------	0-8	Very gravelly silt loam	GC, GM	A-2, A-4	0	10-25	40-65	35-60	35-55	30-45	25-36	6-10
	8-28	Extremely cobbly silt loam, extremely stony silt loam, extremely cobbly loam	GC	A-4, A-2	5-50	25-70	60-70	55-65	40-45	25-40	27-39	10-15
	28-38	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
18:												
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Very gravelly loam, gravelly silt loam, gravelly loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
19:												
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, gravelly silt loam, very gravelly loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely cobbly loam, extremely gravelly loam	GC-GM, GP-GC	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
20:												
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely cobbly loam, extremely gravelly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
20:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	GC, SC	A-4, A-2	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
21:												
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
Lostine---------	0-7	Silt loam	CL	A-4	0	0	100	100	90-100	70-90	27-37	6-12
	7-45	Silt loam	CL	A-4	0	0	100	100	90-95	85-90	22-35	6-12
	45-60	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6	0	0	85-100	80-95	70-85	55-70	20-35	5-20
22:												
Collinston------	0-12	Silt loam	ML, CL	A-6	0	0	100	95-100	90-100	80-90	31-43	12-15
	12-20	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	90-100	80-90	31-47	12-21
	20-60	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	90-100	75-95	30-43	12-21

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
23:												
Collinston------	0-12	Silt loam	CL, ML	A-6	0	0	100	95-100	90-100	80-90	31-43	12-15
	12-20	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	90-100	80-90	31-47	12-21
	20-60	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	90-100	75-95	30-43	12-21
Kearns----------	0-8	Silt loam	CL	A-6, A-4	0	0	100	100	85-95	80-90	30-42	10-16
	8-32	Silt loam	CL	A-6	0	0	100	100	85-95	80-90	31-44	12-18
	32-67	Silt loam, very fine sandy loam	CL	A-4, A-6	0	0	100	100	75-90	70-85	26-32	9-13
24:												
Copenhagen------	0-6	Very channery loam	GC	A-2	0-5	0-15	30-55	25-50	20-50	15-35	29-38	12-16
	6-14	Very gravelly loam, very channery loam, extremely channery loam	GC	A-2	5-10	0-10	25-55	20-50	15-50	10-35	28-38	12-16
	14-24	Unweathered bedrock			---	---	---	---	---	---	---	---
Lonigan---------	0-11	Very fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0-5	80-95	75-95	70-90	45-60	18-33	2-12
	11-16	Very gravelly loam, very gravelly silt loam	GC-GM, GC	A-2, A-4	0	0-10	50-60	40-50	35-50	25-40	21-31	6-12
	16-33	Very gravelly silt loam, very gravelly loam	GC	A-1, A-2, A-4	0	0-40	55-70	40-50	30-45	20-40	21-34	6-15
	33-43	Weathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				*Pct*	*Pct*					*Pct*	
24:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CL, CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
25:												
Darkbull--------	0-10	Gravelly loam	SC-SM	A-4	0	0-5	65-80	60-75	50-65	35-50	20-28	3-7
	10-43	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	0	40-60	30-50	20-40	15-35	20-31	3-10
	43-60	Very gravelly sandy loam, extremely gravelly sandy loam	GW-GC, GM, GC-GM	A-1, A-2	0	0-10	20-45	15-40	10-35	5-30	18-28	3-10
Pyrat-----------	0-14	Gravelly silt loam	GC, SC	A-4	0	0	72-79	57-79	51-76	41-62	24-33	7-12
	14-25	Very gravelly sandy loam	GC	A-4, A-2	0	0	40-60	30-50	20-45	10-36	24-33	7-12
	25-33	Very gravelly sandy loam, extremely gravelly sandy loam	GW-GC, GP-GC, GC-GM	A-1, A-2	0	0	20-60	10-50	4-46	2-25	20-28	4-10
	33-43	Very gravelly sandy loam, extremely gravelly sandy loam	GC-GM, GW-GC	A-2, A-1	0	0-14	20-55	10-45	4-40	2-25	20-28	4-10
	43-65	Extremely gravelly sandy loam, extremely gravelly loamy sand	GW, GP	A-1	0	0-6	20-40	10-30	4-20	1-17	0-21	NP-4

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
25:												
Ecur------------	0-15	Fine sandy loam	SC	A-2, A-4	0	0	100	90-100	80-100	30-50	21-30	6-11
	15-37	Fine sandy loam, loam	SC	A-2, A-4	0	0	90-100	80-100	75-95	30-60	21-30	6-11
	37-44	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
	44-49	Loamy fine sand, gravelly loamy fine sand	SM	A-2	0	0	60-100	60-100	55-100	20-30	15-21	1-4
	49-60	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
26:												
DeJarnet--------	0-3	Gravelly silt loam	SC, CL	A-6	0	0	65-80	60-75	50-70	45-65	33-45	12-17
	3-27	Gravelly silt loam	CL	A-6	0	0	60-70	55-65	55-65	45-60	31-43	12-17
	27-41	Very gravelly loam	GC	A-2	0	5-20	45-55	35-50	20-40	15-35	30-45	12-23
	41-62	Extremely gravelly loamy fine sand	GP-GC, GC	A-2	0	10-25	20-30	15-25	10-20	5-15	23-30	6-10
27:												
Dumps, mine-----	---	---	---	---	---	---	---	---	---	---	---	---
28:												
Ecur------------	0-15	Fine sandy loam	SC	A-4, A-2	0	0	100	90-100	80-100	30-50	21-30	6-11
	15-37	Fine sandy loam, loam	SC	A-4, A-2	0	0	90-100	80-100	75-95	30-60	21-30	6-11
	37-44	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
	44-49	Loamy fine sand, gravelly loamy fine sand	SM	A-2	0	0	60-100	60-100	55-100	20-30	15-21	1-4
	49-60	Loamy fine sand	SM	A-3, A-2	0	0	100	100	50-80	5-30	0-20	NP-2
29:												
Ecur------------	0-15	Fine sandy loam	SC	A-4, A-2	0	0	100	90-100	80-100	30-50	21-30	6-11
	15-37	Fine sandy loam, loam	SC	A-4, A-2	0	0	90-100	80-100	75-95	30-60	21-30	6-11
	37-44	Loamy fine sand	SM	A-3, A-2	0	0	100	100	50-80	5-30	0-20	NP-2
	44-49	Loamy fine sand, gravelly loamy fine sand	SM	A-2	0	0	60-100	60-100	55-100	20-30	15-21	1-4
	49-60	Loamy fine sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
29:												
Darkbull--------	0-10	Gravelly loam	SC-SM	A-4	0	0-5	65-80	60-75	50-65	35-50	20-28	3-7
	10-43	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	0	40-60	30-50	20-40	15-35	20-31	3-10
	43-60	Very gravelly sandy loam, extremely gravelly sandy loam	GW-GC, GM, GC-GM	A-2, A-1	0	0-10	20-45	15-40	10-35	5-30	18-28	3-10
30:												
Elevator--------	0-10	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	33-46	12-18
	10-32	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	39-51	19-25
	32-60	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	38-47	19-25
31:												
Elevator--------	0-10	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	33-46	12-18
	10-32	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	39-51	19-25
	32-60	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	38-47	19-25
Jensen----------	0-12	Silt loam	CL	A-6, A-4	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	CL, GC	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC-GM, GC	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15
32:												
Elevator--------	0-10	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	33-46	12-18
	10-32	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	39-51	19-25
	32-60	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	38-47	19-25
Jensen----------	0-12	Silt loam	CL	A-4, A-6	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	CL, GC	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC, GC-GM	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				*Pct*	*Pct*					*Pct*	
33:												
Fridlo----------	0-7	Silt loam	ML	A-7	0	0	100	100	80-95	75-85	37-48	13-18
	7-24	Silty clay loam	CL	A-7	0	0	100	100	90-100	85-95	41-51	19-22
	24-39	Silty clay loam	CL	A-7	0	0	100	100	90-100	85-95	39-50	19-24
	39-60	Silt loam	CL	A-6	0	0	100	100	85-95	80-90	32-40	13-18
34:												
Goosenawt-------	0-24	Gravelly loam	CL	A-4, A-6	0	0	70-90	65-75	60-70	50-60	27-39	9-13
	24-58	Clay loam	CL	A-6, A-7	0	0	100	95-100	90-100	70-80	39-50	19-23
	58-64	Silt loam, loam	CL	A-4, A-6	0	0	95-100	85-100	80-90	75-85	28-44	10-18
	64-74	Silt loam, loam	CL	A-6, A-4	0	0	95-100	85-100	80-90	75-85	28-44	10-18
35:												
Hans------------	0-10	Silt loam	CL	A-6	0	0	100	100	95-100	85-95	32-42	13-17
	10-26	Silty clay loam	CL	A-7	0	0	100	100	95-100	80-95	39-50	19-24
	26-60	Silty clay loam	CL	A-7, A-6	0	0	100	100	95-100	80-95	38-46	19-22
36:												
Highcreek-------	0-7	Silt loam	CL	A-4, A-6	0	0	100	100	90-100	85-95	31-45	10-17
	7-26	Silt loam, gravelly loam	CL	A-6	0	0-10	75-95	70-90	65-85	55-75	31-45	12-19
	26-66	Gravelly loam	CL, GC	A-6	0	5-10	70-90	65-75	55-75	45-65	31-45	12-19
Sterling--------	0-13	Very gravelly loam	GM, GC	A-2	0-10	15-30	40-55	35-50	25-40	10-35	25-39	6-13
	13-66	Very gravelly loam, extremely gravelly loam	GC	A-2	0-10	10-20	35-55	25-50	20-40	10-35	21-39	6-15
37:												
Highcreek-------	0-7	Silt loam	CL	A-4, A-6	0	0	100	100	90-100	85-95	31-45	10-17
	7-26	Silt loam, gravelly loam	CL	A-6	0	0-10	75-95	70-90	65-85	55-75	31-45	12-19
	26-66	Gravelly loam	CL, GC	A-6	0	5-10	70-90	65-75	55-75	45-65	31-45	12-19
Sterling--------	0-13	Very gravelly loam	GC, GM	A-2	0-10	15-30	40-55	35-50	25-40	10-35	25-39	6-13
	13-66	Very gravelly loam, extremely gravelly loam	GC	A-2	0-10	10-20	35-55	25-50	20-40	10-35	21-39	6-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
38:												
Hillfield-------	0-7	Silt loam	CL	A-4	0	0	100	100	95-100	80-90	22-31	6-10
	7-16	Silt loam	CL	A-4	0	0	100	100	90-100	80-90	22-33	6-12
	16-60	Silt loam, very fine sandy loam	CL	A-4	0	0	100	100	85-95	75-90	20-29	6-11
Kucera----------	0-22	Silt loam	CL	A-4	0	0	100	100	100	90-100	25-40	6-12
	22-42	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	22-35	6-12
	42-60	Silt loam	CL	A-4	0	0	100	100	100	90-100	21-31	6-12
39:												
Hillfield-------	0-7	Silt loam	CL	A-4	0	0	100	100	95-100	80-90	22-31	6-10
	7-16	Silt loam	CL	A-4	0	0	100	100	90-100	80-90	22-33	6-12
	16-60	Silt loam, very fine sandy loam	CL	A-4	0	0	100	100	85-95	75-90	20-29	6-11
Kucera----------	0-22	Silt loam	CL	A-4	0	0	100	100	100	90-100	25-40	6-12
	22-42	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	22-35	6-12
	42-60	Silt loam	CL	A-4	0	0	100	100	100	90-100	21-31	6-12
40:												
Hondoho---------	0-14	Gravelly silt loam	CL, GC, GC-GM, SC, SC-SM	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-4, A-6, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, GM, SC-SM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
40:												
Calpac----------	0-8	Gravelly silt loam	GM, SM	A-4	0	0-5	55-80	50-80	40-60	35-45	27-40	6-12
	8-15	Very gravelly silt loam	GM, GC	A-2, A-4	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	15-23	Extremely cobbly silt loam	GC	A-2	0-15	45-60	30-50	25-45	25-35	20-35	31-43	12-17
	23-60	Extremely cobbly silt loam, extremely cobbly loam	GC	A-2	0-15	55-65	25-50	20-45	20-25	20-25	31-41	12-17
Lizdale---------	0-7	Very gravelly silt loam	GC	A-4, A-2	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	7-10	Very gravelly loam, very gravelly sandy loam	GC	A-2	0	0-10	45-60	35-50	30-45	25-35	22-35	6-12
	10-36	Very gravelly sandy loam	GC	A-2, A-1	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	36-52	Extremely gravelly sandy loam	GW	A-1	0	0-10	20-30	15-25	5-10	0-5	0-36	NP-17
	52-60	Extremely gravelly loamy sand	GC-GM, GP-GM	A-1	0	0-10	10-40	5-35	5-30	5-15	0-23	NP-6
41:												
Hondoho---------	0-14	Gravelly silt loam	CL, SC, SC-SM, GC, GC-GM	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-4, A-6, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, GM, SC-SM	A-2, A-1	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
41:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	SC, GC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-6, A-4	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-7, A-6	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23
42:												
Hondoho---------	0-14	Gravelly silt loam	CL, GC-GM, SC, SC-SM, GC	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-6, A-2, A-4	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	SC-SM, GC-GM, GM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
42:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	SC, GC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-6, A-4	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-6, A-7	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23
43:												
Hondoho---------	0-14	Gravelly silt loam	CL, GC, GC-GM, SC, SC-SM	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-4, A-6, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, GM, SC-SM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
43:												
Ridgecrest------	0-9	Very gravelly silt loam	GC-GM, GC	A-4, A-2	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly silt loam	GC, GC-GM	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	SC, GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---
Hades-----------	0-20	Silt loam	CL	A-6	0	0	75-100	75-100	60-95	50-85	29-41	12-17
	20-42	Silty clay loam	CL	A-7	0	0	100	95-100	80-95	75-85	39-49	19-25
	42-60	Gravelly silty clay loam	CL, GC	A-7	0	10-20	65-75	60-75	50-60	45-55	36-45	18-25
44:												
Hutchley--------	0-6	Gravelly loam	SC	A-2, A-6	0-10	0-10	65-90	55-80	45-70	30-55	25-35	10-20
	6-13	Very gravelly clay loam, very cobbly clay loam, extremely cobbly clay loam	SC, GC	A-6, A-7	0-20	20-50	60-85	50-75	40-65	30-50	35-45	15-25
	13-23	Unweathered bedrock			---	---	---	---	---	---	---	---
McCarey---------	0-8	Silt loam	CL, ML	A-6	0	0-10	95-100	85-100	80-95	70-90	33-43	12-15
	8-15	Silt loam	CL	A-7, A-6	0-20	0-10	90-95	90-95	80-90	70-85	37-47	16-19
	15-19	Silt loam	CL	A-6	0-20	0-10	90-95	90-95	80-90	70-85	35-45	16-19
	19-23	Cobbly silt loam	CL	A-6	5-20	10-30	85-95	80-90	70-80	60-70	31-45	12-19
	23-33	Unweathered bedrock			---	---	---	---	---	---	---	---
Araveton--------	0-8	Silt loam	CL, ML	A-4, A-6	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	8-36	Silt loam, loam	CL	A-6	0	0-10	85-95	80-95	75-90	75-85	31-44	12-18
	36-62	Gravelly loam	CL	A-6	0-5	10-30	65-75	60-70	55-65	50-60	30-38	12-17

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
45:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	GC, SC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Calpac----------	0-8	Gravelly silt loam	SM, GM	A-4	0	0-5	55-80	50-80	40-60	35-45	27-40	6-12
	8-15	Very gravelly silt loam	GM, GC	A-2, A-4	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	15-23	Extremely cobbly silt loam	GC	A-2	0-15	45-60	30-50	25-45	25-35	20-35	31-43	12-17
	23-60	Extremely cobbly silt loam, extremely cobbly loam	GC	A-2	0-15	55-65	25-50	20-45	20-25	20-25	31-41	12-17
Ireland---------	0-8	Very gravelly silt loam	GC, GM	A-2, A-4	0	10-25	40-65	35-60	35-55	30-45	25-36	6-10
	8-28	Extremely cobbly silt loam, extremely stony silt loam, extremely cobbly loam	GC	A-2, A-4	5-50	25-70	60-70	55-65	40-45	25-40	27-39	10-15
	28-38	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
46:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	GC, SC	A-4, A-2	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Northwater------	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	2-20	Gravelly silt loam	SC, ML, SM	A-2, A-4, A-6	0	0	70-85	60-75	40-65	30-55	29-41	9-15
	20-31	Gravelly silt loam, very gravelly silt loam, very gravelly loam	GC	A-2, A-4	0	0-20	45-65	35-55	25-50	20-45	27-39	9-15
	31-37	Very gravelly loam, very gravelly clay loam	GC	A-2	0	15-20	45-60	35-50	25-45	20-40	30-45	12-23
	37-62	Very gravelly loam, very gravelly clay loam	GC	A-2	0	10-30	50-65	40-55	25-45	20-40	30-45	12-23
Clayburn--------	0-4	Silt loam	CL	A-4	0	0	84-94	68-94	60-92	48-75	25-39	6-13
	4-21	Loam	SC, CL	A-4	0-1	0-5	84-94	67-94	56-87	39-64	22-37	6-13
	21-39	Cobbly clay loam	CL	A-7, A-6	0-1	14-22	83-94	66-94	59-89	46-71	39-48	19-23
	39-60	Cobbly clay loam	CL	A-7, A-6	0-4	17-32	81-92	66-92	58-87	46-69	39-48	19-23

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
47:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	SC, GC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Povey-----------	0-5	Gravelly loam	SM, GM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-2, A-4, A-6	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-1, A-2	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC, GC-GM	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
48:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	SC, GC	A-4, A-2	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Povey-----------	0-5	Gravelly loam	SM, GM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-6, A-2, A-4	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-2, A-1	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC, GC-GM	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-4, A-6	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-7, A-6	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
49:												
Inkom-----------	0-6	Silt loam	ML	A-4	0	0	100	95-100	95-100	80-90	28-43	7-13
	6-32	Silt loam	CL	A-6	0	0	100	95-100	95-100	80-90	33-47	12-19
	32-60	Silt loam	CL	A-6	0	0	100	95-100	95-100	80-90	33-47	12-19
50:												
Iphil-----------	0-10	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	20-35	3-12
	10-36	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	22-33	6-12
	36-60	Loam, silt loam	CL	A-4	0	0	95-100	95-100	90-100	70-90	23-31	7-12
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
51:												
Ireland---------	0-8	Very gravelly silt loam	GC, GM	A-2, A-4	0	10-25	40-65	35-60	35-55	30-45	25-36	6-10
	8-28	Extremely cobbly silt loam, extremely stony silt loam, extremely cobbly loam	GC	A-2, A-4	5-50	25-70	60-70	55-65	40-45	25-40	27-39	10-15
	28-38	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
51:												
Calpac----------	0-8	Gravelly silt loam	GM, SM	A-4	0	0-5	55-80	50-80	40-60	35-45	27-40	6-12
	8-15	Very gravelly silt loam	GC, GM	A-4, A-2	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	15-23	Extremely cobbly silt loam	GC	A-2	0-15	45-60	30-50	25-45	25-35	20-35	31-43	12-17
	23-60	Extremely cobbly silt loam, extremely cobbly loam	GC	A-2	0-15	55-65	25-50	20-45	20-25	20-25	31-41	12-17
52:												
Jensen----------	0-12	Silt loam	CL	A-6, A-4	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	GC, CL	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC-GM, GC	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15
53:												
Jensen----------	0-12	Silt loam	CL	A-6, A-4	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	GC, CL	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC, GC-GM	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
54:												
Jensen----------	0-12	Silt loam	CL	A-4, A-6	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	GC, CL	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC-GM, GC	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15
Iphil-----------	0-10	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	20-35	3-12
	10-36	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	22-33	6-12
	36-60	Loam, silt loam	CL	A-4	0	0	95-100	95-100	90-100	70-90	23-31	7-12
Wursten---------	0-14	Gravelly silt loam	CL	A-4	0	0-10	65-80	60-75	55-75	50-65	25-33	8-12
	14-60	Gravelly loam, gravelly silt loam	CL	A-4	0	5-10	60-80	55-75	55-75	45-60	23-31	8-12
55:												
Jovine----------	0-7	Silt loam	ML	A-4	0	0	100	95-100	90-100	80-90	29-40	9-12
	7-60	Silt loam	CL	A-6, A-4	0	0	100	95-100	85-95	75-90	27-37	9-12
56:												
Justesen--------	0-8	Silt loam	CL-ML, CL	A-4	0	0	90-100	79-100	70-97	56-80	26-39	7-13
	8-16	Silt loam, silty clay loam	CL	A-6, A-7	0	0	85-100	70-100	66-100	57-92	36-50	16-24
	16-27	Silty clay loam	CL	A-7	0	0	91-100	80-100	76-100	67-91	39-49	19-25
	27-45	Silt loam	CL	A-6	0	0	91-100	80-100	73-98	62-85	33-45	13-19
	45-60	Gravelly loam	CL, SC	A-6	0	0	72-84	59-84	51-77	37-57	30-38	12-17
57:												
Justesen--------	0-8	Silt loam	CL-ML, CL	A-4	0	0	90-100	79-100	70-97	56-80	26-39	7-13
	8-16	Silt loam, silty clay loam	CL	A-7, A-6	0	0	85-100	70-100	66-100	57-92	36-50	16-24
	16-27	Silty clay loam	CL	A-7	0	0	91-100	80-100	76-100	67-91	39-49	19-25
	27-45	Silt loam	CL	A-6	0	0	91-100	80-100	73-98	62-85	33-45	13-19
	45-60	Gravelly loam	CL, SC	A-6	0	0	72-84	59-84	51-77	37-57	30-38	12-17

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
58:												
Justesen--------	0-8	Silt loam	CL, CL-ML	A-4	0	0	90-100	79-100	70-97	56-80	26-39	7-13
	8-16	Silt loam, silty clay loam	CL	A-6, A-7	0	0	85-100	70-100	66-100	57-92	36-50	16-24
	16-27	Silty clay loam	CL	A-7	0	0	91-100	80-100	76-100	67-91	39-49	19-25
	27-45	Silt loam	CL	A-6	0	0	91-100	80-100	73-98	62-85	33-45	13-19
	45-60	Gravelly loam	CL, SC	A-6	0	0	72-84	59-84	51-77	37-57	30-38	12-17
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Buist-----------	0-15	Gravelly silt loam	CL, GC	A-4	0-5	0-10	70-85	65-80	60-75	45-65	24-31	8-12
	15-28	Very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0	45-70	35-60	30-55	20-50	27-39	10-15
	28-60	Extremely gravelly fine sandy loam	GM	A-1	0	10-30	15-30	10-25	5-25	5-20	17-24	2-6
59:												
Kearns----------	0-8	Silt loam	CL	A-4, A-6	0	0	100	100	85-95	80-90	30-42	10-16
	8-32	Silt loam	CL	A-6	0	0	100	100	85-95	80-90	31-44	12-18
	32-67	Silt loam, very fine sandy loam	CL	A-4, A-6	0	0	100	100	75-90	70-85	26-32	9-13
60:												
Kearns----------	0-8	Silt loam	CL	A-6, A-4	0	0	100	100	85-95	80-90	30-42	10-16
	8-32	Silt loam	CL	A-6	0	0	100	100	85-95	80-90	31-44	12-18
	32-67	Silt loam, very fine sandy loam	CL	A-6, A-4	0	0	100	100	75-90	70-85	26-32	9-13
61:												
Kidman----------	0-17	Fine sandy loam	SC	A-4	0	0	100	100	70-85	40-55	21-35	4-12
	17-38	Fine sandy loam	SC	A-4	0	0	100	100	70-85	40-55	21-35	4-12
	38-66	Loam	SC	A-4	0	0	100	100	70-85	40-55	20-31	4-12
62:												
Kidman----------	0-17	Fine sandy loam	SC	A-4	0	0	100	100	70-85	40-55	21-35	4-12
	17-38	Fine sandy loam	SC	A-4	0	0	100	100	70-85	40-55	21-35	4-12
	38-66	Loam	SC	A-4	0	0	100	100	70-85	40-55	20-31	4-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
62:												
Preston---------	0-3	Fine sand	SM	A-3, A-2	0	0	100	100	50-80	5-30	0-22	NP-2
	3-65	Fine sand, loamy fine sand, sand	SM	A-2, A-3	0	0	100	100	50-80	5-30	0-20	NP-2
63:												
Kucera----------	0-22	Silt loam	CL	A-4	0	0	100	100	100	90-100	25-40	6-12
	22-42	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	22-35	6-12
	42-60	Silt loam	CL	A-4	0	0	100	100	100	90-100	21-31	6-12
64:												
Lagonot---------	0-10	Silt loam	ML	A-6	0	0	100	100	90-100	80-90	31-44	10-17
	10-60	Silt loam	CL	A-6	0	0	100	100	85-95	75-85	30-40	12-17
65:												
Langless--------	0-3	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	3-9	Silt loam	ML, CL-ML	A-4	0	0	100	100	85-90	80-90	28-37	7-10
	9-47	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	27-35	9-12
	47-63	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	26-37	9-17
66:												
Langless--------	0-3	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	3-9	Silt loam	CL-ML, ML	A-4	0	0	100	100	85-90	80-90	28-37	7-10
	9-47	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	27-35	9-12
	47-63	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	26-37	9-17
Logan-----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	4-22	Silt loam	ML	A-7	0	0	100	100	90-100	75-95	41-55	15-18
	22-64	Silt loam	CL	A-6	0	0	100	100	95-100	85-95	31-42	12-19
67:												
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
68:												
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
69:												
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
Hondoho---------	0-14	Gravelly silt loam	GC-GM, SC, SC-SM, GC, CL	A-4, A-6	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-4, A-6, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very gravelly silt loam, very gravelly loam, very cobbly loam	GC-GM, SC-SM, GM	A-2, A-1	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
70:												
Logan-----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	4-22	Silt loam	ML	A-7	0	0	100	100	90-100	75-95	41-55	15-18
	22-64	Silt loam	CL	A-6	0	0	100	100	95-100	85-95	31-42	12-19
71:												
Lonigan---------	0-11	Very fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0-5	80-95	75-95	70-90	45-60	18-33	2-12
	11-16	Very gravelly loam, very gravelly silt loam	GC, GC-GM	A-2, A-4	0	0-10	50-60	40-50	35-50	25-40	21-31	6-12
	16-33	Very gravelly silt loam, very gravelly loam	GC	A-2, A-4, A-1	0	0-40	55-70	40-50	30-45	20-40	21-34	6-15
	33-43	Weathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
71:												
Lizdale---------	0-7	Very gravelly silt loam	GC	A-2, A-4	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	7-10	Very gravelly loam, very gravelly sandy loam	GC	A-2	0	0-10	45-60	35-50	30-45	25-35	22-35	6-12
	10-36	Very gravelly sandy loam	GC	A-2, A-1	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	36-52	Extremely gravelly sandy loam	GW	A-1	0	0-10	20-30	15-25	5-10	0-5	0-36	NP-17
	52-60	Extremely gravelly loamy sand	GC-GM, GP-GM	A-1	0	0-10	10-40	5-35	5-30	5-15	0-23	NP-6
72:												
Lostine---------	0-7	Silt loam	CL	A-4	0	0	100	100	90-100	70-90	27-37	6-12
	7-45	Silt loam	CL	A-4	0	0	100	100	90-95	85-90	22-35	6-12
	45-60	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-95	70-85	55-70	20-35	5-20
73:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
74:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
74:												
Broadhead-------	0-9	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	33-46	12-18
	9-15	Silty clay loam, silty clay	CH, CL	A-7	0	0-5	95-100	90-100	80-90	75-90	47-66	25-36
	15-36	Silty clay	CH	A-7	0	0	90-100	85-100	80-100	80-100	50-70	29-44
	36-41	Gravelly silty clay, silty clay	CH, CL	A-7	0	0-15	80-100	70-100	55-95	50-85	45-66	23-36
	41-60	Gravelly clay loam, clay loam	CH, CL	A-7	0	0-15	75-100	70-100	55-95	50-85	45-66	23-36
75:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
Broadhead-------	0-9	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	33-46	12-18
	9-15	Silty clay loam, silty clay	CH, CL	A-7	0	0-5	95-100	90-100	80-90	75-90	47-66	25-36
	15-36	Silty clay	CH	A-7	0	0	90-100	85-100	80-100	80-100	50-70	29-44
	36-41	Gravelly silty clay, silty clay	CL, CH	A-7	0	0-15	75-100	70-100	55-95	50-85	45-66	23-36
	41-60	Gravelly clay loam, clay loam	CL, CH	A-7	0	0-15	75-100	70-100	55-95	50-85	45-66	23-36
76:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
76:												
Lonigan---------	0-11	Very fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0-5	80-95	75-95	70-90	45-60	18-33	2-12
	11-16	Very gravelly loam, very gravelly silt loam	GC, GC-GM	A-2, A-4	0	0-10	50-60	40-50	35-50	25-40	21-31	6-12
	16-33	Very gravelly silt loam, very gravelly loam	GC	A-4, A-2, A-1	0	0-40	55-70	40-50	30-45	20-40	21-34	6-15
	33-43	Weathered bedrock			---	---	---	---	---	---	---	---
77:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
Obnot-----------	0-5	Cobbly silty clay loam	CL	A-7	10-25	25-30	95-100	90-100	90-100	83-91	41-53	19-25
	5-31	Silty clay, clay loam	CH	A-7	0	0-10	94-100	89-100	79-100	75-100	47-70	25-40
	31-34	Clay loam	CL	A-7	0	0	90-100	75-100	63-98	49-78	34-51	15-25
	34-60	Cobbly clay loam, clay loam	CH, CL	A-7	5-20	10-25	95-100	90-100	90-95	72-77	46-53	25-29
78:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
78:												
Yago------------	0-10	Very stony silty clay loam	CL	A-7	15-25	15-25	65-90	60-85	55-80	45-70	41-51	19-22
	10-40	Very cobbly clay loam, very cobbly silty clay loam	CH, CL, GC, SC	A-7	0-5	40-55	60-80	55-75	50-70	40-60	45-57	23-29
	40-60	Very cobbly silty clay loam, very cobbly silt loam	CL	A-6, A-7	0	35-50	75-95	70-90	65-85	55-80	35-50	16-24
79:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
Yago------------	0-10	Very stony silty clay loam	CL	A-7	15-25	15-25	65-90	60-85	55-80	45-70	41-51	19-22
	10-40	Very cobbly clay loam, very cobbly silty clay loam	CL, SC, CH, GC	A-7	0-5	40-55	60-80	55-75	50-70	40-60	45-57	23-29
	40-60	Very cobbly silty clay loam, very cobbly silt loam	CL	A-7, A-6	0	35-50	75-95	70-90	65-85	55-80	35-50	16-24
80:												
Mellor----------	0-4	Silt loam	CL	A-6, A-4	0	0	100	100	85-95	75-85	28-42	10-17
	4-16	Silty clay loam	CL	A-7, A-6	0	0	100	100	90-100	85-95	39-49	19-25
	16-60	Silt loam	CL	A-6	0	0	100	95-100	80-90	75-85	30-40	12-19

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
80:												
Freedom---------	0-13	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	31-45	12-19
	13-34	Silt loam	CL	A-6	0	0	100	100	95-100	90-95	31-45	12-19
	34-60	Silt loam, silty clay loam	CL	A-6	0	0	100	100	95-100	90-95	27-47	10-25
81:												
Neeley----------	0-7	Silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	18-32	2-9
	7-14	Silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	19-33	3-12
	14-65	Silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	18-28	3-9
82:												
Northwater------	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	2-20	Gravelly silt loam	SC, ML, SM	A-6, A-2, A-4	0	0	70-85	60-75	40-65	30-55	29-41	9-15
	20-31	Gravelly silt loam, very gravelly silt loam, very gravelly loam	GC	A-2, A-4	0	0-20	45-65	35-55	25-50	20-45	27-39	9-15
	31-37	Very gravelly loam, very gravelly clay loam	GC	A-2	0	15-20	45-60	35-50	25-45	20-40	30-45	12-23
	37-62	Very gravelly loam, very gravelly clay loam	GC	A-2	0	10-30	50-65	40-55	25-45	20-40	30-45	12-23

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
82:												
Povey-----------	0-5	Gravelly loam	GM, SM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-6, A-4, A-2	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-1, A-2	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC-GM, GC	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-6, A-4	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-6, A-7	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23
83:												
Parehat---------	0-6	Silt loam	CL	A-4	0	0	100	100	80-90	70-80	22-37	6-13
	6-52	Silt loam	CL	A-6	0	0	90-100	85-100	80-95	75-85	31-38	13-15
	52-64	Silt loam, loam	CL	A-6	0	0	90-100	85-100	80-95	75-85	31-40	13-19
84:												
Parleys---------	0-5	Silt loam	CL	A-6	0	0	100	100	95-100	80-90	31-45	11-18
	5-26	Silty clay loam	CL	A-7	0	0	100	100	100	90-100	39-51	19-25
	26-64	Silt loam, loam	CL	A-6	0	0	100	100	95-100	70-95	27-38	12-19
85:												
Parleys---------	0-5	Silt loam	CL	A-6	0	0	100	100	95-100	80-90	31-45	11-18
	5-26	Silty clay loam	CL	A-7	0	0	100	100	100	90-100	39-51	19-25
	26-64	Silt loam, loam	CL	A-6	0	0	100	100	95-100	70-95	27-38	12-19

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
86:												
Parleys---------	0-5	Silt loam	CL	A-6	0	0	100	100	95-100	80-90	31-45	11-18
	5-26	Silty clay loam	CL	A-7	0	0	100	100	100	90-100	39-51	19-25
	26-64	Silt loam, loam	CL	A-6	0	0	100	100	95-100	70-95	27-38	12-19
Welby-----------	0-11	Silt loam	CL	A-4	0	0	100	100	95-100	75-90	25-35	6-12
	11-36	Silt loam, loam	CL	A-4	0	0	100	100	95-100	75-90	21-35	6-12
	36-60	Fine sandy loam	CL-ML	A-4	0	0	100	100	80-95	60-70	17-31	2-12
87:												
Parleys---------	0-5	Silt loam	CL	A-6	0	0	100	100	95-100	80-90	31-45	11-18
	5-26	Silty clay loam	CL	A-7	0	0	100	100	100	90-100	39-51	19-25
	26-64	Silt loam, loam	CL	A-6	0	0	100	100	95-100	70-95	27-38	12-19
Wheelon---------	0-8	Silt loam	CL	A-6	0	0	100	95-100	85-100	80-90	31-45	12-19
	8-14	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	95-100	90-95	35-46	16-24
	14-20	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	95-100	85-95	29-42	12-21
	20-45	Silty clay loam	CL	A-7	0	0	100	95-100	80-95	75-85	39-49	19-25
	45-60	Silt loam, silty clay loam	CL	A-6	0	0	100	95-100	95-100	85-95	29-42	12-21
88:												
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-4, A-6	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-6, A-7	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
88:												
Povey-----------	0-5	Gravelly loam	SM, GM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-2, A-4, A-6	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-1, A-2	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC-GM, GC	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15
89:												
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-6, A-4	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	CL-ML, ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-6, A-7	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23
Stines----------	0-13	Gravelly loam	CL-ML	A-4	0	0-10	60-75	55-70	50-65	45-60	20-33	3-10
	13-24	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GC-GM	A-2	0	10-35	35-50	30-45	25-40	20-35	20-31	3-10
	24-44	Very gravelly sandy loam	GC-GM	A-2	0-10	10-30	30-45	25-40	20-35	15-30	19-28	3-10
	44-60	Extremely cobbly loamy sand	GP-GC, GW	A-1	5-20	30-60	25-40	20-35	10-20	0-15	16-27	2-10

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
89:												
Lonigan---------	0-11	Very fine sandy loam	SC-SM, SM, CL-ML, ML	A-4	0	0-5	80-95	75-95	70-90	45-60	18-33	2-12
	11-16	Very gravelly loam, very gravelly silt loam	GC-GM, GC	A-4, A-2	0	0-10	50-60	40-50	35-50	25-40	21-31	6-12
	16-33	Very gravelly silt loam, very gravelly loam	GC	A-2, A-4, A-1	0	0-40	55-70	40-50	30-45	20-40	21-34	6-15
	33-43	Weathered bedrock			---	---	---	---	---	---	---	---
90:												
Pits, gravel----	0-60	Gravel, cobbles	GP	A-1	---	---	---	---	---	---	---	---
91:												
Povey-----------	0-5	Gravelly loam	GM, SM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-6, A-2, A-4	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-1, A-2	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC-GM, GC	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15
Hades-----------	0-20	Silt loam	CL	A-6	0	0	75-100	75-100	60-95	50-85	29-41	12-17
	20-42	Silty clay loam	CL	A-7	0	0	100	95-100	80-95	75-85	39-49	19-25
	42-60	Gravelly silty clay loam	GC, CL	A-7	0	10-20	65-75	60-75	50-60	45-55	36-45	18-25

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
91:												
Hondoho---------	0-14	Gravelly silt loam	GC, GC-GM, SC-SM, CL, SC	A-6, A-4	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-6, A-4, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GM, GC-GM, SC-SM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
92:												
Povey-----------	0-5	Gravelly loam	GM, SM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-4, A-2, A-6	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-2, A-1	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC-GM, GC	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
92:												
Ireland---------	0-8	Very gravelly silt loam	GM, GC	A-2, A-4	0	10-25	40-65	35-60	35-55	30-45	25-36	6-10
	8-28	Extremely cobbly silt loam, extremely stony silt loam, extremely cobbly loam	GC	A-2, A-4	5-50	25-70	60-70	55-65	40-45	25-40	27-39	10-15
	28-38	Unweathered bedrock			---	---	---	---	---	---	---	---
Calpac----------	0-8	Gravelly silt loam	GM, SM	A-4	0	0-5	55-80	50-80	40-60	35-45	27-40	6-12
	8-15	Very gravelly silt loam	GM, GC	A-4, A-2	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	15-23	Extremely cobbly silt loam	GC	A-2	0-15	45-60	30-50	25-45	25-35	20-35	31-43	12-17
	23-60	Extremely cobbly silt loam, extremely cobbly loam	GC	A-2	0-15	55-65	25-50	20-45	20-25	20-25	31-41	12-17
93:												
Povey-----------	0-5	Gravelly loam	GM, SM	A-4	0	0-13	65-80	55-70	45-60	35-50	27-50	4-11
	5-12	Very gravelly loam, very gravelly sandy loam, very cobbly loam	GM	A-2	0-5	10-35	40-60	35-55	25-45	15-35	25-43	6-13
	12-20	Very cobbly loam	GC, SC	A-6, A-4, A-2	0	30-40	45-65	35-55	25-45	20-40	28-43	10-17
	20-35	Very gravelly sandy loam, extremely gravelly sandy loam, extremely gravelly loam	GC	A-2, A-1	0-15	10-30	40-55	35-50	25-45	10-30	20-33	4-12
	35-60	Extremely gravelly sandy loam	GC, GC-GM	A-2	0	10-35	25-45	20-40	15-35	10-25	15-25	4-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
93:												
Pavohroo--------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-7	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	7-16	Silt loam	CL	A-4, A-6	0	0-5	90-100	85-95	80-90	70-80	31-46	10-18
	16-39	Gravelly silt loam	ML, CL-ML	A-4	0	0-10	70-80	65-75	55-65	50-60	27-46	6-12
	39-61	Gravelly clay loam	GC	A-7, A-6	0	5-10	60-70	55-65	50-60	40-50	38-50	19-23
94:												
Povirt----------	0-10	Silty clay loam	CL	A-7	0	0	100	100	90-100	90-100	40-57	19-29
	10-20	Silty clay	CL, CH	A-7	0	0	100	100	90-100	90-100	40-66	19-36
	20-60	Silty clay	CH	A-7	0	0	100	100	90-100	90-100	50-70	29-44
95:												
Raldridge-------	0-3	Gravelly loam	CL	A-6, A-4	0	0	70-80	65-75	50-70	50-60	28-41	10-17
	3-14	Gravelly silty clay loam	CL	A-7	0	0-10	70-80	65-75	55-75	50-70	39-49	19-25
	14-22	Very gravelly clay loam	GC	A-2	0	5-10	35-45	30-40	25-35	20-30	39-46	19-22
	22-60	Very gravelly loam	GC	A-2	0	5-10	35-45	30-40	20-35	15-30	26-33	9-13
96:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
97:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
98:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Arbone----------	0-15	Silt loam	CL	A-4	0	0	85-100	80-90	70-90	70-85	25-35	8-12
	15-60	Gravelly silt loam, gravelly loam	GC	A-4	0	0-5	60-80	55-75	50-70	40-60	24-31	8-12
Ririe-----------	0-14	Silt loam	CL	A-6, A-4	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
99:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Iphil-----------	0-10	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	20-35	3-12
	10-36	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	22-33	6-12
	36-60	Loam, silt loam	CL	A-4	0	0	95-100	95-100	90-100	70-90	23-31	7-12
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
100:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
101:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
101:												
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
102:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
103:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Kucera----------	0-22	Silt loam	CL	A-4	0	0	100	100	100	90-100	25-40	6-12
	22-42	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	22-35	6-12
	42-60	Silt loam	CL	A-4	0	0	100	100	100	90-100	21-31	6-12
104:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Thatcher--------	0-7	Silt loam	CL	A-6, A-4	0	0	95-100	90-100	90-100	70-90	30-41	10-17
	7-35	Silty clay loam, clay loam	CL	A-6, A-7	0	0	95-100	95-100	95-100	85-95	38-47	19-24
	35-60	Silt loam, fine sandy loam, loam	CL	A-4, A-6	0	0	95-100	90-100	70-100	45-90	23-37	7-17

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
104:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
105:												
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
Lanoak----------	0-30	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	30-49	Silt loam	ML	A-4	0	0	100	100	95-100	90-100	27-41	6-13
	49-60	Silt loam	CL	A-6	0	0	100	100	95-100	90-100	31-45	12-19
106:												
Ridgecrest------	0-9	Very gravelly silt loam	GC, GC-GM	A-2, A-4	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly silt loam	GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	SC, GC, GC-GM	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
106:												
Hondoho---------	0-14	Gravelly silt loam	SC-SM, CL, SC, GC, GC-GM	A-6, A-4	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC, GC-GM	A-6, A-4, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, GM, SC-SM	A-2, A-1	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
107:												
Ridgecrest------	0-9	Very gravelly silt loam	GC-GM, GC	A-2, A-4	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly silt loam	GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	GC-GM, SC, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---
Hondoho---------	0-14	Gravelly silt loam	CL, SC, SC-SM, GC, GC-GM	A-6, A-4	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-2, A-4, A-6	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, SC-SM, GM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
107:												
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	GC, SC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---
108:												
Ridgecrest------	0-9	Very gravelly silt loam	GC, GC-GM	A-4, A-2	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly silt loam	GC, GC-GM	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	GC-GM, SC, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---
Hondoho---------	0-14	Gravelly silt loam	GC, GC-GM, SC, SC-SM, CL	A-6, A-4	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-6, A-4, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	SC-SM, GC-GM, GM	A-1, A-2	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
108:												
Lizdale---------	0-7	Very gravelly silt loam	GC	A-4, A-2	0	5-15	40-50	35-45	30-40	25-40	25-37	6-12
	7-10	Very gravelly loam, very gravelly sandy loam	GC	A-2	0	0-10	45-60	35-50	30-45	25-35	22-35	6-12
	10-36	Very gravelly sandy loam	GC	A-1, A-2	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	36-52	Extremely gravelly sandy loam	GW	A-1	0	0-10	20-30	15-25	5-10	0-5	0-36	NP-17
	52-60	Extremely gravelly loamy sand	GP-GM, GC-GM	A-1	0	0-10	10-40	5-35	5-30	5-15	0-23	NP-6
109:												
Ridgecrest------	0-9	Very gravelly silt loam	GC-GM, GC	A-2, A-4	0	10-20	45-65	40-60	35-55	30-50	26-37	7-11
	9-13	Very cobbly silt loam	GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	26-37	7-11
	13-31	Very cobbly silt loam, very cobbly loam	SC, GC-GM, GC	A-4	0	30-55	65-80	60-75	50-65	40-55	24-34	7-11
	31-35	Extremely cobbly sandy loam	GC-GM	A-2	0	55-80	35-55	30-50	20-40	10-30	20-29	4-10
	35-45	Unweathered bedrock			---	---	---	---	---	---	---	---
Hymas-----------	0-2	Very cobbly loam	GC	A-2	5-15	25-45	40-60	35-55	25-45	15-35	25-33	6-10
	2-7	Very cobbly silt loam, very gravelly loam, very stony loam	GC, SC	A-2, A-4	5-15	30-45	50-75	45-70	35-55	25-45	22-33	6-12
	7-11	Extremely cobbly loam, very cobbly loam, very gravelly loam	GC	A-2	5-20	25-65	35-50	30-45	20-35	10-30	21-31	6-12
	11-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
110:												
Ririe-----------	0-14	Silt loam	CL	A-6, A-4	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Buist-----------	0-15	Gravelly silt loam	CL, GC	A-4	0-5	0-10	70-85	65-80	60-75	45-65	24-31	8-12
	15-28	Very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0	45-70	35-60	30-55	20-50	27-39	10-15
	28-60	Extremely gravelly fine sandy loam	GM	A-1	0	10-30	15-30	10-25	5-25	5-20	17-24	2-6
111:												
Ririe-----------	0-14	Silt loam	CL	A-6, A-4	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
112:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
112:												
Cedarhill-------	0-7	Gravelly silt loam	CL	A-6	0-5	0-15	65-80	60-75	55-70	50-65	29-43	9-18
	7-12	Gravelly loam, gravelly silt loam	CL	A-6	0	0-15	65-80	60-75	55-70	50-65	30-38	12-17
	12-27	Gravelly loam, very gravelly loam, gravelly silt loam	GC	A-4, A-2	0	0-15	45-65	35-60	25-50	15-40	22-32	6-11
	27-60	Extremely gravelly loam, extremely cobbly loam	GP-GC, GC-GM	A-1	0-10	10-50	40-60	30-50	20-40	10-30	0-33	NP-12
113:												
Ririe-----------	0-14	Silt loam	CL	A-6, A-4	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Hondoho---------	0-14	Gravelly silt loam	GC, GC-GM, SC, SC-SM, CL	A-6, A-4	0	0-9	66-76	51-76	45-76	37-64	28-43	7-17
	14-28	Very gravelly silt loam, very cobbly loam	GC-GM, GC	A-6, A-4, A-2	0	10-45	55-75	50-70	40-60	25-45	28-43	10-17
	28-60	Very cobbly loam, very gravelly silt loam, very gravelly coarse sandy loam	GC-GM, GM, SC-SM	A-2, A-1	0	15-55	55-75	50-70	35-55	15-35	16-32	2-13
114:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Iphil-----------	0-10	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	20-35	3-12
	10-36	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	22-33	6-12
	36-60	Loam, silt loam	CL	A-4	0	0	95-100	95-100	90-100	70-90	23-31	7-12
Kucera----------	0-22	Silt loam	CL	A-4	0	0	100	100	100	90-100	25-40	6-12
	22-42	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	22-35	6-12
	42-60	Silt loam	CL	A-4	0	0	100	100	100	90-100	21-31	6-12

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
115:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-60	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Iphil-----------	0-10	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	20-35	3-12
	10-36	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	22-33	6-12
	36-60	Loam, silt loam	CL	A-4	0	0	95-100	95-100	90-100	70-90	23-31	7-12
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
116:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Rexburg---------	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	24-35	7-12
	14-22	Silt loam	CL	A-4	0	0	100	100	95-100	80-100	26-35	9-12
	22-60	Silt loam, silt	CL	A-4	0	0	100	100	95-100	80-100	21-29	6-10
117:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
118:												
Ririe-----------	0-14	Silt loam	CL	A-4, A-6	0	0	95-100	95-100	95-100	75-90	29-37	9-12
	14-63	Silt loam	CL	A-4	0	0	95-100	95-100	95-100	75-90	23-31	7-12
Watercanyon-----	0-5	Silt loam	CL	A-4	0	0	100	100	95-100	90-100	22-33	6-12
	5-33	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10
	33-62	Silt loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	100	95-100	75-100	17-29	2-10

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
119:												
Samaria---------	0-5	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	30-42	11-15
	5-16	Gravelly silt loam, gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	55-65	28-39	11-15
	16-27	Gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	50-60	28-35	12-16
	27-64	Gravelly sandy loam	GC	A-6	0	0-10	60-70	55-65	45-55	35-45	26-34	11-16
120:												
Samaria---------	0-5	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	30-42	11-15
	5-16	Gravelly silt loam, gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	55-65	28-39	11-15
	16-27	Gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	50-60	28-35	12-16
	27-64	Gravelly sandy loam	GC	A-6	0	0-10	60-70	55-65	45-55	35-45	26-34	11-16
121:												
Samaria---------	0-5	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	30-42	11-15
	5-16	Gravelly silt loam, gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	55-65	28-39	11-15
	16-27	Gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	50-60	28-35	12-16
	27-64	Gravelly sandy loam	GC	A-6	0	0-10	60-70	55-65	45-55	35-45	26-34	11-16
Pollynot--------	0-7	Silt loam	CL	A-6, A-4	0	0	100	95-100	85-95	75-85	28-45	10-17
	7-17	Silt loam	CL	A-4, A-6	0	0	100	95-100	85-95	75-85	28-45	10-17
	17-41	Silt loam, loam	CL	A-4	0	0-5	90-100	85-100	80-90	55-75	25-35	8-12
	41-56	Very gravelly sandy loam	GC	A-2, A-1	0	0-10	45-65	40-55	30-40	20-30	22-33	6-10
	56-60	Extremely gravelly loam	GP-GC, GC-GM	A-1	0	0-15	15-30	10-25	10-20	5-20	19-26	3-7
122:												
Samaria---------	0-5	Silt loam	CL	A-6	0	0-5	95-100	90-100	85-95	80-90	30-42	11-15
	5-16	Gravelly silt loam, gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	55-65	28-39	11-15
	16-27	Gravelly loam	CL	A-6	0	0-5	70-80	65-75	60-70	50-60	28-35	12-16
	27-64	Gravelly sandy loam	GC	A-6	0	0-10	60-70	55-65	45-55	35-45	26-34	11-16

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
122:												
Sterling--------	0-13	Very gravelly loam	GM, GC	A-2	0-10	15-30	40-55	35-50	25-40	10-35	25-39	6-13
	13-66	Very gravelly loam, extremely gravelly loam	GC	A-2	0-10	10-20	35-55	25-50	20-40	10-35	21-39	6-15
123:												
Sterling--------	0-13	Very gravelly loam	GC, GM	A-2	0-10	15-30	40-55	35-50	25-40	10-35	25-39	6-13
	13-66	Very gravelly loam, extremely gravelly loam	GC	A-2	0-10	10-20	35-55	25-50	20-40	10-35	21-39	6-15
124:												
Thatcher--------	0-7	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	90-100	70-90	30-41	10-17
	7-35	Silty clay loam, clay loam	CL	A-6, A-7	0	0	95-100	95-100	95-100	85-95	38-47	19-24
	35-60	Silt loam, fine sandy loam, loam	CL	A-4, A-6	0	0	95-100	90-100	70-100	45-90	23-37	7-17
125:												
Thatcher--------	0-7	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	90-100	70-90	30-41	10-17
	7-35	Silty clay loam, clay loam	CL	A-7, A-6	0	0	95-100	95-100	95-100	85-95	38-47	19-24
	35-60	Silt loam, fine sandy loam, loam	CL	A-6, A-4	0	0	95-100	90-100	70-100	45-90	23-37	7-17
Jensen----------	0-12	Silt loam	CL	A-6, A-4	0	0	85-100	85-100	70-90	65-85	28-41	9-15
	12-45	Gravelly silt loam, silt loam, gravelly loam	GC, CL	A-6	0	0	60-90	55-85	45-70	40-65	31-41	12-17
	45-60	Very gravelly loam, very gravelly silt loam, gravelly loam	GC-GM, GC	A-2	0	0-5	30-65	25-60	20-40	10-35	25-34	9-15

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
126:												
Freedom---------	0-13	Silt loam	CL	A-6	0	0	100	100	90-100	85-95	31-45	12-19
	13-34	Silt loam	CL	A-6	0	0	100	100	95-100	90-95	31-45	12-19
	34-60	Silt loam, silty clay loam	CL	A-6	0	0	100	100	95-100	90-95	27-47	10-25
127:												
Tickason--------	0-10	Very fine sandy loam	CL-ML	A-4	0	0	100	100	85-100	65-80	22-32	6-9
	10-23	Fine sandy loam, very fine sandy loam, loam	CL	A-4	0	0	100	95-100	80-100	50-75	22-35	6-12
	23-31	Fine sandy loam, very fine sandy loam, loam	CL	A-4	0	0	100	95-100	80-100	50-75	21-31	6-12
	31-38	Loam, fine sandy loam	CL	A-4	0	0	90-100	85-100	75-100	50-90	21-31	6-12
	38-60	Loam	CL	A-4	0	0	100	95-100	80-100	50-75	22-35	6-12
128:												
Tickason--------	0-10	Very fine sandy loam	CL-ML	A-4	0	0	100	100	85-100	65-80	22-32	6-9
	10-23	Very fine sandy loam, loam, fine sandy loam	CL	A-4	0	0	100	95-100	80-100	50-75	22-35	6-12
	23-31	Loam, very fine sandy loam, fine sandy loam	CL	A-4	0	0	100	95-100	80-100	50-75	21-31	6-12
	31-38	Fine sandy loam, loam	CL	A-4	0	0	90-100	85-100	75-100	50-90	21-31	6-12
	38-60	Loam	CL	A-4	0	0	100	95-100	80-100	50-75	22-35	6-12
129:												
Tirod-----------	0-18	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	80-90	33-47	12-19
	18-30	Loam	CL	A-6	0	0	90-100	85-100	80-90	75-85	33-47	12-19
	30-40	Clay loam, loam	CL	A-6, A-7	0	0	90-100	85-95	75-85	65-75	34-51	15-25
	40-62	Loam	CL	A-6	0	0	80-90	75-90	60-80	50-75	32-40	13-19

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
130:												
Toefoot---------	0-26	Silt loam	CL	A-4	0	0	95-100	90-100	80-90	75-85	27-40	8-12
	26-33	Gravelly loam	CL	A-4	0	0	55-100	55-100	55-90	55-85	25-34	8-11
	33-40	Gravelly loam, very gravelly sandy loam	GC	A-2, A-4	0	0	50-80	40-75	30-65	15-40	25-34	8-11
	40-62	Silt loam	CL	A-4	0	0	95-100	90-100	80-90	75-85	24-30	8-11
131:												
Welby-----------	0-11	Silt loam	CL	A-4	0	0	100	100	95-100	75-90	25-35	6-12
	11-36	Silt loam, loam	CL	A-4	0	0	100	100	95-100	75-90	21-35	6-12
	36-60	Fine sandy loam	CL-ML	A-4	0	0	100	100	80-95	60-70	17-31	2-12
Parleys---------	0-5	Silt loam	CL	A-6	0	0	100	100	95-100	80-90	31-45	11-18
	5-26	Silty clay loam	CL	A-7	0	0	100	100	100	90-100	39-51	19-25
	26-64	Silt loam, loam	CL	A-6	0	0	100	100	95-100	70-95	27-38	12-19
132:												
Wursten---------	0-16	Gravelly silt loam	CL	A-4	0	0-10	65-80	60-75	55-75	50-65	25-33	8-12
	16-60	Gravelly loam, gravelly silt loam	CL	A-4	0	5-10	60-80	55-75	55-75	45-60	23-31	8-12
133:												
Yago------------	0-10	Very stony silty clay loam	CL	A-7	15-25	15-25	65-90	60-85	55-80	45-70	41-51	19-22
	10-40	Very cobbly clay loam, very cobbly silty clay loam	SC, CH, CL, GC	A-7	0-5	40-55	60-80	55-75	50-70	40-60	45-57	23-29
	40-60	Very cobbly silty clay loam, very cobbly silt loam	CL	A-6, A-7	0	35-50	75-95	70-90	65-85	55-80	35-50	16-24

Table 13.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
133:												
Manila----------	0-5	Silt loam	CL	A-6	0	0	95-100	90-100	85-95	70-90	33-47	12-19
	5-19	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	75-90	47-57	25-29
	19-45	Clay, silty clay, silty clay loam	CH	A-7	0	0	95-100	90-100	85-95	70-90	47-70	25-40
	45-60	Silt loam, loam	CL	A-4	0	0	95-100	90-100	85-95	70-90	22-30	7-12
134:												
Water-----------	---	---	---	---	---	---	---	---	---	---	---	---

Table 14.--Physical Properties of the Soils

(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 and soil name	Depth	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
1:												
Araveton----------------	0-8	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43	5	6	48
	8-36	18-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.32	.43			
	36-62	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
Hades-------------------	0-20	18-25	1.20-1.40	0.60-2.00	0.15-0.18	0.0-2.9	1.0-3.0	.32	.43	5	6	48
	20-42	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	42-60	27-35	1.30-1.40	0.20-0.60	0.16-0.18	0.0-2.9	0.5-1.0	.15	.32			
2:												
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
3:												
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
4:												
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
5:												
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	7	38
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
6:												
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.12-0.15	0.0-2.9	1.0-3.0	.28	.43	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
6:												
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	7	38
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
7:												
Bayhook-----------------	0-7	5-18	1.25-1.35	0.20-0.60	0.18-0.21	0.0-2.9	1.0-2.0	.49	.49	5	4L	86
	7-13	10-19	1.30-1.50	0.20-0.60	0.18-0.21	0.0-2.9	0.5-1.0	.55	.55			
	13-60	5-17	1.30-1.50	0.20-0.60	0.18-0.21	0.0-2.9	0.0-0.5	.64	.64			
8:												
Bayhook-----------------	0-7	5-18	1.25-1.35	0.20-0.60	0.18-0.21	0.0-2.9	1.0-2.0	.49	.49	5	4L	86
	7-13	10-19	1.30-1.50	0.20-0.60	0.18-0.21	0.0-2.9	0.5-1.0	.55	.55			
	13-60	5-17	1.30-1.50	0.20-0.60	0.18-0.21	0.0-2.9	0.0-0.5	.64	.64			
Ecur--------------------	0-15	10-17	1.20-1.40	2.00-6.00	0.12-0.15	0.0-2.9	0.5-1.0	.28	.32	5	3	86
	15-37	10-17	1.20-1.40	2.00-6.00	0.12-0.17	0.0-2.9	0.5-1.0	.28	.32			
	37-44	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
	44-49	4-8	1.40-1.60	6.00-20.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.24			
	49-60	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
9:												
Bingham-----------------	0-6	10-20	1.35-1.45	0.60-2.00	0.10-0.14	0.0-2.9	2.0-4.0	.28	.37	5	6	48
	6-27	18-25	1.35-1.45	0.60-2.00	0.10-0.14	3.0-5.9	1.0-3.0	.24	.32			
	27-38	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	38-45	5-10	1.50-1.60	6.00-20.00	0.02-0.04	0.0-2.9	0.5-1.0	.10	.17			
	45-65	5-10	1.50-1.60	6.00-20.00	0.02-0.04	0.0-2.9	0.5-1.0	.10	.17			
10:												
Bingham-----------------	0-6	10-20	1.35-1.45	0.60-2.00	0.10-0.14	0.0-2.9	2.0-4.0	.28	.37	5	6	48
	6-27	18-25	1.35-1.45	0.60-2.00	0.10-0.14	3.0-5.9	1.0-3.0	.24	.32			
	27-38	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	38-45	5-10	1.50-1.60	6.00-20.00	0.02-0.04	0.0-2.9	0.5-1.0	.10	.17			
	45-65	5-10	1.50-1.60	6.00-20.00	0.02-0.04	0.0-2.9	0.5-1.0	.10	.17			
Tirod-------------------	0-18	18-27	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	18-30	18-27	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32			
	30-40	22-35	1.35-1.45	0.20-0.60	0.18-0.20	3.0-5.9	1.0-3.0	.32	.43			
	40-62	20-27	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.5-1.0	.37	.43			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
11:												
Bloor-------------------	0-12	10-20	1.30-1.50	0.60-2.00	0.11-0.18	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	12-20	22-27	1.40-1.60	0.06-0.20	0.12-0.19	3.0-5.9	0.0-0.5	.43	.43			
	20-29	10-15	1.50-1.70	0.06-0.20	0.12-0.18	0.0-2.9	0.0-0.5	.49	.49			
	29-47	4-15	1.30-1.50	2.00-6.00	0.12-0.17	0.0-2.9	0.5-1.0	.37	.43			
	47-60	10-20	1.40-1.60	0.60-2.00	0.07-0.16	0.0-2.9	0.0-0.5	.43	.49			
Brinnum-----------------	0-9	18-27	1.20-1.30	0.60-2.00	0.11-0.13	3.0-5.9	0.5-1.0	.49	.49	5	4L	86
	9-31	18-27	1.20-1.40	0.20-0.60	0.08-0.10	3.0-5.9	0.5-1.0	.55	.55			
	31-60	18-35	1.25-1.45	0.20-0.60	0.08-0.10	3.0-5.9	0.0-0.5	.55	.55			
12:												
Bothwell----------------	0-9	16-22	1.20-1.35	0.60-2.00	0.19-0.21	3.0-5.9	3.0-4.0	.37	.37	5	5	56
	9-20	22-35	1.30-1.40	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	20-45	28-35	1.35-1.45	0.20-0.60	0.19-0.21	3.0-5.9	0.5-2.0	.43	.43			
	45-60	18-35	1.30-1.50	0.60-2.00	0.19-0.21	3.0-5.9	0.5-1.0	.43	.43			
13:												
Bothwell----------------	0-9	16-22	1.20-1.35	0.60-2.00	0.19-0.21	3.0-5.9	3.0-4.0	.37	.37	5	5	56
	9-20	22-35	1.30-1.40	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	20-45	28-35	1.35-1.45	0.20-0.60	0.19-0.21	3.0-5.9	0.5-2.0	.43	.43			
	45-60	18-35	1.30-1.50	0.60-2.00	0.19-0.21	3.0-5.9	0.5-1.0	.43	.43			
Hades-------------------	0-20	18-25	1.20-1.40	0.60-2.00	0.15-0.18	0.0-2.9	1.0-3.0	.32	.43	5	6	48
	20-42	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	42-60	27-35	1.30-1.40	0.20-0.60	0.16-0.18	0.0-2.9	0.5-1.0	.15	.32			
Justesen----------------	0-8	12-20	1.15-1.25	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	4	6	48
	8-16	24-34	1.30-1.40	0.20-0.60	0.15-0.18	3.0-5.9	1.0-3.0	.37	.43			
	16-27	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	27-45	20-27	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	45-60	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
14:												
Brinnum-----------------	0-9	18-27	1.20-1.30	0.60-2.00	0.11-0.13	3.0-5.9	0.5-1.0	.49	.49	5	4L	86
	9-31	18-27	1.20-1.40	0.20-0.60	0.08-0.10	3.0-5.9	0.5-1.0	.55	.55			
	31-60	18-35	1.25-1.45	0.20-0.60	0.08-0.10	3.0-5.9	0.0-0.5	.55	.55			
Logan-------------------	0-4	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	4-22	22-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	4.0-8.0	.28	.28			
	22-64	18-24	1.25-1.35	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.32	.32			
Langless----------------	0-3	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	3-9	12-15	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.32	.32			
	9-47	15-18	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	1.0-3.0	.37	.37			
	47-63	15-25	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	0.5-1.0	.37	.37			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
15:												
Buckboard---------------	0-15	18-24	1.30-1.40	0.60-2.00	0.16-0.18	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	15-50	18-27	1.40-1.50	0.20-0.60	0.16-0.20	3.0-5.9	1.0-4.0	.32	.32			
	50-65	18-24	1.35-1.45	0.20-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.32	.32			
16:												
Buist-------------------	0-15	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49	2	6	48
	15-28	16-23	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-3.0	.32	.43			
	28-60	5-10	1.45-1.55	0.57-6.00	0.05-0.09	0.0-2.9	0.5-1.0	.05	.37			
17:												
Calpac------------------	0-8	10-18	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.24	.37	5	7	38
	8-15	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.43			
	15-23	18-25	1.25-1.35	0.60-2.00	0.06-0.07	3.0-5.9	1.0-3.0	.10	.37			
	23-60	18-25	1.25-1.35	0.60-2.00	0.05-0.07	3.0-5.9	1.0-2.0	.10	.37			
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Ireland-----------------	0-8	10-16	1.30-1.50	0.60-2.00	0.09-0.11	0.0-2.9	2.0-4.0	.15	.43	2	8	0
	8-28	16-22	1.40-1.65	0.60-2.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.37			
	28-38	---	---	0.00-0.14	---	---	---	---	---			
18:												
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	7	38
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
19:												
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	6	48
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
20:												
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	7	38
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permeability (K_{sat})	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Kf	T	Wind erodibility group	Wind erodibility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
20:												
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
21:												
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	6	48
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
Lostine-----------------	0-7	10-18	1.10-1.30	0.60-2.00	0.19-0.21	0.0-2.9	3.0-4.0	.43	.43	4	5	56
	7-45	10-18	1.10-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	45-60	10-28	1.10-1.30	2.00-6.00	0.07-0.21	0.0-2.9	0.5-1.0	.28	.37			
22:												
Collinston--------------	0-12	18-22	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	1.0-4.0	.43	.43	5	4L	86
	12-20	18-30	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	20-60	18-30	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	0.5-1.0	.43	.43			
23:												
Collinston--------------	0-12	18-22	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	1.0-4.0	.43	.43	5	4L	86
	12-20	18-30	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	20-60	18-30	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	0.5-1.0	.43	.43			
Kearns------------------	0-8	16-24	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	8-32	18-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32			
	32-67	15-19	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.43	.43			
24:												
Copenhagen--------------	0-6	18-24	0.80-1.00	0.60-2.00	0.06-0.08	0.0-2.9	1.0-2.0	.10	.37	1	8	0
	6-14	18-24	1.20-1.40	0.60-2.00	0.10-0.13	0.0-2.9	0.5-2.0	.10	.37			
	14-24	---	---	0.00-0.01	---	---	---	---	---			
Lonigan-----------------	0-11	5-18	0.95-1.05	2.00-6.00	0.19-0.20	0.0-2.9	1.0-2.0	.32	.43	3	3	86
	11-16	10-18	1.00-1.10	2.00-6.00	0.14-0.16	0.0-2.9	0.5-1.0	.24	.37			
	16-33	10-22	1.30-1.40	2.00-6.00	0.08-0.10	0.0-2.9	0.5-1.0	.24	.37			
	33-43	---	---	0.00-0.01	---	---	---	---	---			
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
25:												
Darkbull----------------	0-10	7-12	1.30-1.40	0.60-2.00	0.12-0.15	0.0-2.9	1.0-2.0	.32	.37	3	5	56
	10-43	7-15	1.30-1.40	0.60-2.00	0.12-0.15	0.0-2.9	1.0-2.0	.32	.37			
	43-60	6-15	1.30-1.40	6.00-20.00	0.04-0.08	0.0-2.9	0.5-1.0	.15	.24			
Pyrat-------------------	0-14	12-18	1.20-1.30	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.24	.49	3	5	56
	14-25	12-18	1.20-1.30	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.20	.49			
	25-33	8-15	1.30-1.40	2.00-6.00	0.04-0.07	0.0-2.9	0.5-1.0	.10	.37			
	33-43	8-15	1.30-1.40	2.00-6.00	0.04-0.07	0.0-2.9	0.5-1.0	.10	.37			
	43-65	2-8	1.40-1.50	20.00-20.00	0.01-0.04	0.0-2.9	0.0-0.5	.05	.20			
Ecur--------------------	0-15	10-17	1.20-1.40	2.00-6.00	0.12-0.15	0.0-2.9	0.5-1.0	.28	.32	5	3	86
	15-37	10-17	1.20-1.40	2.00-6.00	0.12-0.17	0.0-2.9	0.5-1.0	.28	.32			
	37-44	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
	44-49	4-8	1.40-1.60	6.00-20.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.24			
	49-60	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
26:												
DeJarnet----------------	0-3	18-25	1.20-1.30	0.60-2.00	0.12-0.16	3.0-5.9	2.0-4.0	.24	.37	5	6	48
	3-27	18-25	1.30-1.40	0.60-2.00	0.10-0.15	3.0-5.9	1.0-3.0	.28	.37			
	27-41	18-32	1.40-1.50	0.60-2.00	0.07-0.11	3.0-5.9	0.5-1.0	.20	.37			
	41-62	10-15	1.50-1.60	2.00-6.00	0.02-0.05	3.0-5.9	0.5-1.0	.10	.20			
27:												
Dumps, mine-------------	---	---	---	---	---	---	---	---	---	-	---	---
28:												
Ecur--------------------	0-15	10-17	1.20-1.40	2.00-6.00	0.12-0.15	0.0-2.9	0.5-1.0	.28	.32	5	3	86
	15-37	10-17	1.20-1.40	2.00-6.00	0.12-0.17	0.0-2.9	0.5-1.0	.28	.32			
	37-44	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
	44-49	4-8	1.40-1.60	6.00-20.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.24			
	49-60	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
29:												
Ecur--------------------	0-15	10-17	1.20-1.40	2.00-6.00	0.12-0.15	0.0-2.9	0.5-1.0	.28	.32	5	3	86
	15-37	10-17	1.20-1.40	2.00-6.00	0.12-0.17	0.0-2.9	0.5-1.0	.28	.32			
	37-44	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
	44-49	4-8	1.40-1.60	6.00-20.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.24			
	49-60	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			
Darkbull----------------	0-10	7-12	1.30-1.40	0.60-2.00	0.12-0.15	0.0-2.9	1.0-2.0	.32	.37	3	5	56
	10-43	7-15	1.30-1.40	0.60-2.00	0.12-0.15	0.0-2.9	1.0-2.0	.32	.37			
	43-60	6-15	1.30-1.40	6.00-20.00	0.04-0.08	0.0-2.9	0.5-1.0	.15	.24			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
30:												
Elevator----------------	0-10	18-26	1.20-1.35	0.20-0.60	0.17-0.19	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	10-32	28-35	1.40-1.55	0.06-0.20	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43			
	32-60	28-35	1.35-1.45	0.06-0.60	0.17-0.19	3.0-5.9	0.5-1.0	.43	.43			
31:												
Elevator----------------	0-10	18-26	1.20-1.35	0.20-0.60	0.17-0.19	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	10-32	28-35	1.40-1.55	0.06-0.20	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43			
	32-60	28-35	1.35-1.45	0.06-0.60	0.17-0.19	3.0-5.9	0.5-1.0	.43	.43			
Jensen------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	5	56
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
32:												
Elevator----------------	0-10	18-26	1.20-1.35	0.20-0.60	0.17-0.19	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	10-32	28-35	1.40-1.55	0.06-0.20	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43			
	32-60	28-35	1.35-1.45	0.06-0.60	0.17-0.19	3.0-5.9	0.5-1.0	.43	.43			
Jensen------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	5	56
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
33:												
Fridlo------------------	0-7	20-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	3.0-5.0	.28	.28	3	4L	86
	7-24	27-34	1.30-1.40	0.06-0.20	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32			
	24-39	27-32	1.30-1.40	0.06-0.20	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32			
	39-60	20-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	0.5-1.0	.37	.37			
34:												
Goosenawt---------------	0-24	15-20	1.40-1.50	0.60-2.00	0.11-0.14	0.0-2.9	1.0-4.0	.28	.37	5	6	48
	24-58	27-33	1.30-1.40	0.20-0.60	0.17-0.21	3.0-5.9	1.0-3.0	.32	.32			
	58-64	15-26	1.20-1.30	0.60-2.00	0.16-0.20	3.0-5.9	1.0-3.0	.37	.37			
	64-74	15-26	1.20-1.30	0.60-2.00	0.16-0.20	3.0-5.9	1.0-3.0	.37	.37			
35:												
Hans--------------------	0-10	19-24	1.25-1.35	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32	5	5	56
	10-26	28-34	1.30-1.40	0.06-0.20	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32			
	26-60	27-31	1.30-1.40	0.06-0.20	0.19-0.21	3.0-5.9	0.5-2.0	.37	.37			
36:												
Highcreek---------------	0-7	16-25	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.37	5	5	56
	7-26	18-27	1.30-1.40	0.60-2.00	0.15-0.20	3.0-5.9	1.0-3.0	.28	.37			
	26-66	18-27	1.30-1.40	0.60-2.00	0.14-0.15	3.0-5.9	1.0-3.0	.28	.43			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
36:												
Sterling----------------	0-13	10-20	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	2.0-4.0	.15	.37	5	6	48
	13-66	10-22	1.30-1.40	0.60-2.00	0.05-0.11	0.0-2.9	0.5-3.0	.10	.37			
37:												
Highcreek---------------	0-7	16-25	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.37	5	5	56
	7-26	18-27	1.30-1.40	0.60-2.00	0.15-0.20	3.0-5.9	1.0-3.0	.28	.37			
	26-66	18-27	1.30-1.40	0.60-2.00	0.14-0.15	3.0-5.9	1.0-3.0	.28	.43			
Sterling----------------	0-13	10-20	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	2.0-4.0	.15	.37	5	6	48
	13-66	10-22	1.30-1.40	0.60-2.00	0.05-0.11	0.0-2.9	0.5-3.0	.10	.37			
38:												
Hillfield---------------	0-7	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	7-16	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.43	.43			
	16-60	10-17	1.20-1.30	0.60-2.00	0.14-0.21	0.0-2.9	0.0-0.5	.49	.49			
Kucera------------------	0-22	10-18	1.40-1.50	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	5	5	56
	22-42	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	42-60	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
39:												
Hillfield---------------	0-7	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.43	.43	5	4L	86
	7-16	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.43	.43			
	16-60	10-17	1.20-1.30	0.60-2.00	0.14-0.21	0.0-2.9	0.0-0.5	.49	.49			
Kucera------------------	0-22	10-18	1.40-1.50	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	5	5	56
	22-42	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	42-60	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
40:												
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Calpac------------------	0-8	10-18	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.24	.37	5	7	38
	8-15	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.43			
	15-23	18-25	1.25-1.35	0.60-2.00	0.06-0.07	3.0-5.9	1.0-3.0	.10	.37			
	23-60	18-25	1.25-1.35	0.60-2.00	0.05-0.07	3.0-5.9	1.0-2.0	.10	.37			
Lizdale-----------------	0-7	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.49	2	6	48
	7-10	10-18	1.25-1.35	2.00-6.00	0.08-0.10	0.0-2.9	1.0-3.0	.05	.15			
	10-36	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	36-52	3-25	1.40-1.50	1.98-5.95	0.10-0.14	0.0-2.9	0.0-0.5	.20	.20			
	52-60	3-10	1.15-1.30	2.00-20.00	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
41:												
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
42:												
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
43:												
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Hades-------------------	0-20	18-25	1.20-1.40	0.60-2.00	0.15-0.18	0.0-2.9	1.0-3.0	.32	.43	5	6	48
	20-42	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	42-60	27-35	1.30-1.40	0.20-0.60	0.16-0.18	0.0-2.9	0.5-1.0	.15	.32			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
44:												
Hutchley----------------	0-6	15-25	1.15-1.30	0.60-2.00	0.12-0.16	0.0-2.9	1.0-2.0	.20	.37	1	6	48
	6-13	27-35	1.35-1.50	0.20-0.60	0.09-0.12	3.0-5.9	0.5-2.0	.15	.32			
	13-23	---	---	0.00-0.01	---	---	---	---	---			
McCarey-----------------	0-8	18-22	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	2.0-4.0	.37	.37	2	6	48
	8-15	23-27	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	2.0-4.0	.32	.37			
	15-19	23-27	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.24	.32			
	19-23	18-27	1.25-1.35	0.20-0.60	0.14-0.17	3.0-5.9	1.0-3.0	.24	.32			
	23-33	---	---	0.00-0.01	---	---	---	---	---			
Araveton----------------	0-8	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43	5	6	48
	8-36	18-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.32	.43			
	36-62	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
45:												
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Calpac------------------	0-8	10-18	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.24	.37	5	7	38
	8-15	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.43			
	15-23	18-25	1.25-1.35	0.60-2.00	0.06-0.07	3.0-5.9	1.0-3.0	.10	.37			
	23-60	18-25	1.25-1.35	0.60-2.00	0.05-0.07	3.0-5.9	1.0-2.0	.10	.37			
Ireland-----------------	0-8	10-16	1.30-1.50	0.60-2.00	0.09-0.11	0.0-2.9	2.0-4.0	.15	.43	2	8	0
	8-28	16-22	1.40-1.65	0.60-2.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.37			
	28-38	---	---	0.00-0.14	---	---	---	---	---			
46:												
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Northwater--------------	0-2	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	6	48
	2-20	15-22	1.20-1.30	0.60-2.00	0.14-0.16	0.0-2.9	2.0-4.0	.28	.37			
	20-31	15-22	1.20-1.30	0.60-2.00	0.12-0.15	0.0-2.9	1.0-3.0	.24	.43			
	31-37	18-32	1.25-1.35	0.60-2.00	0.09-0.12	3.0-5.9	0.5-1.0	.20	.37			
	37-62	18-32	1.25-1.35	0.60-2.00	0.09-0.12	3.0-5.9	0.5-1.0	.20	.32			
Clayburn----------------	0-4	10-20	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.28	5	5	56
	4-21	10-20	1.20-1.30	0.60-2.00	0.16-0.18	0.0-2.9	1.0-3.0	.37	.28			
	21-39	27-33	1.40-1.50	0.60-2.00	0.15-0.17	3.0-5.9	1.0-2.0	.24	.28			
	39-60	27-33	1.40-1.50	0.60-2.00	0.14-0.16	3.0-5.9	1.0-2.0	.24	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
47:												
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
48:												
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
49:												
Inkom-------------------	0-6	12-20	1.20-1.30	0.60-2.00	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37	5	4L	86
	6-32	18-27	1.25-1.35	0.60-2.00	0.18-0.21	3.0-5.9	2.0-4.0	.43	.43			
	32-60	18-27	1.25-1.35	0.60-2.00	0.18-0.21	3.0-5.9	2.0-4.0	.43	.43			
50:												
Iphil-------------------	0-10	7-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	4L	86
	10-36	10-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	36-60	12-18	1.20-1.30	0.60-2.00	0.18-0.21	0.0-2.9	0.5-1.0	.49	.49			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
51:												
Ireland------------------	0-8	10-16	1.30-1.50	0.60-2.00	0.09-0.11	0.0-2.9	2.0-4.0	.15	.43	2	8	0
	8-28	16-22	1.40-1.65	0.60-2.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.37			
	28-38	---	---	0.00-0.14	---	---	---	---	---			
Calpac-------------------	0-8	10-18	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.24	.37	5	7	38
	8-15	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.43			
	15-23	18-25	1.25-1.35	0.60-2.00	0.06-0.07	3.0-5.9	1.0-3.0	.10	.37			
	23-60	18-25	1.25-1.35	0.60-2.00	0.05-0.07	3.0-5.9	1.0-2.0	.10	.37			
52:												
Jensen-------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
53:												
Jensen-------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
54:												
Jensen-------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
Iphil--------------------	0-10	7-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	4L	86
	10-36	10-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	36-60	12-18	1.20-1.30	0.60-2.00	0.18-0.21	0.0-2.9	0.5-1.0	.49	.49			
Wursten------------------	0-14	13-18	1.20-1.45	0.60-2.00	0.13-0.17	0.0-2.9	1.0-2.0	.32	.43	5	4L	86
	14-60	13-18	1.30-1.40	0.60-2.00	0.11-0.16	0.0-2.9	0.0-1.0	.28	.49			
55:												
Jovine-------------------	0-7	15-18	1.30-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.37	.37	5	5	56
	7-60	15-18	1.30-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-4.0	.32	.32			
56:												
Justesen-----------------	0-8	12-20	1.15-1.25	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	4	6	48
	8-16	24-34	1.30-1.40	0.20-0.60	0.15-0.18	3.0-5.9	1.0-3.0	.37	.43			
	16-27	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	27-45	20-27	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	45-60	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
57:												
Justesen----------------	0-8	12-20	1.15-1.25	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	4	6	48
	8-16	24-34	1.30-1.40	0.20-0.60	0.15-0.18	3.0-5.9	1.0-3.0	.37	.43			
	16-27	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	27-45	20-27	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	45-60	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
58:												
Justesen----------------	0-8	12-20	1.15-1.25	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	4	5	56
	8-16	24-34	1.30-1.40	0.20-0.60	0.15-0.18	3.0-5.9	1.0-3.0	.37	.43			
	16-27	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	27-45	20-27	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	45-60	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Buist-------------------	0-15	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49	2	6	48
	15-28	16-23	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-3.0	.32	.43			
	28-60	5-10	1.45-1.55	0.57-6.00	0.05-0.09	0.0-2.9	0.5-1.0	.05	.37			
59:												
Kearns------------------	0-8	16-24	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	8-32	18-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32			
	32-67	15-19	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.43	.43			
60:												
Kearns------------------	0-8	16-24	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	8-32	18-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.32	.32			
	32-67	15-19	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.43	.43			
61:												
Kidman------------------	0-17	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	3	86
	17-38	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	1.0-3.0	.24	.24			
	38-66	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	0.5-1.0	.32	.32			
62:												
Kidman------------------	0-17	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	1.0-3.0	.17	.17	5	3	86
	17-38	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	1.0-3.0	.24	.24			
	38-66	8-18	1.30-1.50	2.00-6.00	0.10-0.12	0.0-2.9	0.5-1.0	.32	.32			
Preston-----------------	0-3	1-5	1.45-1.60	6.00-20.00	0.05-0.07	0.0-2.9	1.0-2.0	.15	.15	5	1	250
	3-65	0-5	1.45-1.60	6.00-20.00	0.04-0.06	0.0-2.9	0.5-1.0	.10	.10			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
63:												
Kucera------------------	0-22	10-18	1.40-1.50	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	5	5	56
	22-42	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	42-60	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
64:												
Lagonot-----------------	0-10	16-24	1.20-1.40	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.37	5	4L	86
	10-60	18-24	1.20-1.40	0.60-2.00	0.19-0.21	3.0-5.9	0.5-2.0	.37	.37			
65:												
Langless----------------	0-3	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	3-9	12-15	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.32	.32			
	9-47	15-18	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	1.0-3.0	.37	.37			
	47-63	15-25	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	0.5-1.0	.37	.37			
66:												
Langless----------------	0-3	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	3-9	12-15	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.32	.32			
	9-47	15-18	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	1.0-3.0	.37	.37			
	47-63	15-25	1.25-1.35	0.60-2.00	0.15-0.17	0.0-2.9	0.5-1.0	.37	.37			
Logan-------------------	0-4	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	4-22	22-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	4.0-8.0	.28	.28			
	22-64	18-24	1.25-1.35	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.32	.32			
67:												
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
68:												
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
69:												
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.20-1.40	0.60-2.00	0.08-0.11	3.0-5.9	0.0-1.0	.17	.32			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
70:												
Logan-------------------	0-4	0-15	0.60-0.70	5.95-99.90	0.30-0.60	---	70-100	---	---	5	4L	86
	4-22	22-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	4.0-8.0	.28	.28			
	22-64	18-24	1.25-1.35	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.32	.32			
71:												
Lonigan-----------------	0-11	5-18	0.95-1.05	2.00-6.00	0.19-0.20	0.0-2.9	1.0-2.0	.32	.43	3	3	86
	11-16	10-18	1.00-1.10	2.00-6.00	0.14-0.16	0.0-2.9	0.5-1.0	.24	.37			
	16-33	10-22	1.30-1.40	2.00-6.00	0.08-0.10	0.0-2.9	0.5-1.0	.24	.37			
	33-43	---	---	0.00-0.01	---	---	---	---	---			
Lizdale-----------------	0-7	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.49	2	6	48
	7-10	10-18	1.25-1.35	2.00-6.00	0.08-0.10	0.0-2.9	1.0-3.0	.05	.15			
	10-36	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	36-52	3-25	1.40-1.50	1.98-5.95	0.10-0.14	0.0-2.9	0.0-0.5	.20	.20			
	52-60	3-10	1.15-1.30	2.00-20.00	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			
72:												
Lostine-----------------	0-7	10-18	1.10-1.30	0.60-2.00	0.19-0.21	0.0-2.9	3.0-4.0	.43	.43	4	5	56
	7-45	10-18	1.10-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	45-60	10-28	1.10-1.30	2.00-6.00	0.07-0.21	0.0-2.9	0.5-1.0	.28	.37			
73:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
74:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
Broadhead---------------	0-9	18-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	9-15	35-50	1.30-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.28	.28			
	15-36	40-60	1.25-1.40	0.00-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.37	.37			
	36-41	32-50	1.40-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.17	.32			
	41-60	32-50	1.40-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.17	.32			
75:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
75:												
Broadhead---------------	0-9	18-26	1.20-1.30	0.20-0.60	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	9-15	35-50	1.30-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.28	.28			
	15-36	40-60	1.25-1.40	0.00-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.37	.37			
	36-41	32-50	1.40-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.17	.32			
	41-60	32-50	1.40-1.50	0.06-0.20	0.15-0.21	6.0-8.9	1.0-3.0	.17	.32			
76:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
Lonigan-----------------	0-11	5-18	0.95-1.05	2.00-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.43	3	3	86
	11-16	10-18	1.00-1.10	2.00-6.00	0.14-0.16	0.0-2.9	0.5-1.0	.24	.37			
	16-33	10-22	1.30-1.40	2.00-6.00	0.08-0.10	0.0-2.9	0.5-1.0	.24	.37			
	33-43	---	---	0.00-0.01	---	---	---	---	---			
77:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
Obnot-------------------	0-5	27-35	1.35-1.45	0.00-0.06	0.16-0.18	3.0-5.9	2.0-4.0	.24	.37	5	8	0
	5-31	35-55	1.35-1.45	0.00-0.06	0.15-0.17	6.0-8.9	1.0-3.0	.24	.24			
	31-34	22-35	1.35-1.45	0.20-0.60	0.18-0.20	3.0-5.9	1.0-3.0	.32	.43			
	34-60	35-40	1.30-1.40	0.00-0.06	0.19-0.21	6.0-8.9	0.5-1.0	.24	.28			
78:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
Yago--------------------	0-10	27-32	1.40-1.50	0.06-0.20	0.13-0.15	3.0-5.9	2.0-4.0	.17	.37	5	8	0
	10-40	32-40	1.30-1.40	0.06-0.20	0.09-0.11	6.0-8.9	1.0-3.0	.20	.37			
	40-60	23-34	1.40-1.50	0.06-0.20	0.15-0.18	3.0-5.9	1.0-3.0	.20	.43			
79:												
Manila------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
79:												
Yago--------------------	0-10	27-32	1.40-1.50	0.06-0.20	0.13-0.15	3.0-5.9	2.0-4.0	.17	.37	5	8	0
	10-40	32-40	1.30-1.40	0.06-0.20	0.09-0.11	6.0-8.9	1.0-3.0	.20	.37			
	40-60	23-34	1.40-1.50	0.06-0.20	0.15-0.18	3.0-5.9	1.0-3.0	.20	.43			
80:												
Mellor------------------	0-4	15-24	1.20-1.30	0.20-0.60	0.12-0.15	3.0-5.9	1.0-3.0	.37	.37	5	4L	86
	4-16	27-35	1.30-1.40	0.06-0.20	0.11-0.13	3.0-5.9	1.0-2.0	.37	.37			
	16-60	18-27	1.20-1.30	0.20-0.60	0.11-0.13	3.0-5.9	0.5-1.0	.37	.37			
Freedom-----------------	0-13	18-27	1.10-1.15	0.60-2.00	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43	5	4L	86
	13-34	18-27	1.15-1.25	0.60-2.00	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43			
	34-60	15-35	1.15-1.25	0.60-2.00	0.16-0.18	3.0-5.9	0.5-1.0	.49	.49			
81:												
Neeley------------------	0-7	5-14	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	7-14	6-18	1.25-1.45	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	14-65	6-14	1.25-1.45	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
82:												
Northwater--------------	0-2	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	6	48
	2-20	15-22	1.20-1.30	0.60-2.00	0.14-0.16	0.0-2.9	2.0-4.0	.28	.37			
	20-31	15-22	1.20-1.30	0.60-2.00	0.12-0.15	0.0-2.9	1.0-3.0	.24	.43			
	31-37	18-32	1.25-1.35	0.60-2.00	0.09-0.12	3.0-5.9	0.5-1.0	.20	.37			
	37-62	18-32	1.25-1.35	0.60-2.00	0.09-0.12	3.0-5.9	0.5-1.0	.20	.32			
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
83:												
Parehat-----------------	0-6	10-20	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	6-52	19-22	1.25-1.35	0.60-2.00	0.17-0.19	3.0-5.9	0.5-2.0	.43	.43			
	52-64	19-27	1.25-1.35	0.60-2.00	0.16-0.19	3.0-5.9	0.5-1.0	.37	.43			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
84:												
Parleys-----------------	0-5	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	5-26	27-35	1.20-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	26-64	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
85:												
Parleys-----------------	0-5	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	5-26	27-35	1.20-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	26-64	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
86:												
Parleys-----------------	0-5	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	5-26	27-35	1.20-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	26-64	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
Welby-------------------	0-11	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-3.0	.43	.43	5	4L	86
	11-36	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-3.0	.43	.43			
	36-60	5-18	1.30-1.40	2.00-6.00	0.13-0.15	0.0-2.9	0.5-1.0	.37	.37			
87:												
Parleys-----------------	0-5	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	5-26	27-35	1.20-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	26-64	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
Wheelon-----------------	0-8	18-27	1.30-1.40	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43	5	4L	86
	8-14	24-34	1.40-1.50	0.20-0.60	0.19-0.21	3.0-5.9	0.5-1.0	.43	.43			
	14-20	18-30	1.35-1.55	0.20-0.60	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	20-45	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	45-60	18-30	1.35-1.55	0.20-0.60	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
88:												
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
89:												
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
Stines------------------	0-13	7-15	0.90-1.05	2.00-6.00	0.11-0.14	0.0-2.9	1.0-3.0	.20	.37	4	7	38
	13-24	7-15	0.90-1.10	2.00-6.00	0.07-0.10	0.0-2.9	1.0-2.0	.15	.37			
	24-44	7-15	1.10-1.25	2.00-6.00	0.06-0.09	0.0-2.9	0.5-1.0	.10	.32			
	44-60	5-15	1.10-1.25	6.00-20.00	0.01-0.02	0.0-2.9	0.0-0.5	.02	.10			
Lonigan-----------------	0-11	5-18	0.95-1.05	2.00-6.00	0.19-0.20	0.0-2.9	1.0-2.0	.32	.43	3	3	86
	11-16	10-18	1.00-1.10	2.00-6.00	0.14-0.16	0.0-2.9	0.5-1.0	.24	.37			
	16-33	10-22	1.30-1.40	2.00-6.00	0.08-0.10	0.0-2.9	0.5-1.0	.24	.37			
	33-43	---	---	0.00-0.01	---	---	---	---	---			
90:												
Pits, gravel------------	0-60	---	---	---	---	---	---	---	---	-	---	---
91:												
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
Hades-------------------	0-20	18-25	1.20-1.40	0.60-2.00	0.15-0.18	0.0-2.9	1.0-3.0	.32	.43	5	6	48
	20-42	27-35	1.30-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-2.0	.37	.37			
	42-60	27-35	1.30-1.40	0.20-0.60	0.16-0.18	0.0-2.9	0.5-1.0	.15	.32			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
92:												
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
Ireland-----------------	0-8	10-16	1.30-1.50	0.60-2.00	0.09-0.11	0.0-2.9	2.0-4.0	.15	.43	2	8	0
	8-28	16-22	1.40-1.65	0.60-2.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.37			
	28-38	---	---	0.00-0.14	---	---	---	---	---			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
92:												
Calpac------------------	0-8	10-18	1.20-1.30	0.60-2.00	0.15-0.17	0.0-2.9	3.0-5.0	.24	.37	5	7	38
	8-15	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.43			
	15-23	18-25	1.25-1.35	0.60-2.00	0.06-0.07	3.0-5.9	1.0-3.0	.10	.37			
	23-60	18-25	1.25-1.35	0.60-2.00	0.05-0.07	3.0-5.9	1.0-2.0	.10	.37			
93:												
Povey-------------------	0-5	8-18	1.30-1.45	0.60-2.00	0.12-0.14	0.0-2.9	4.0-10	.20	.32	5	7	38
	5-12	10-20	1.30-1.45	0.60-2.00	0.06-0.11	0.0-2.9	2.0-6.0	.15	.32			
	12-20	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	20-35	8-18	1.30-1.45	0.60-2.00	0.06-0.08	0.0-2.9	0.5-2.0	.15	.32			
	35-60	8-18	1.10-1.65	2.00-6.00	0.03-0.21	0.0-2.9	1.0-2.0	.20	.28			
Pavohroo----------------	0-1	0-2	0.50-0.60	5.95-99.90	0.30-0.60	---	70-100	---	---	5	5	56
	1-7	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	7-16	16-26	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.37	.43			
	16-39	10-18	1.10-1.20	0.60-2.00	0.15-0.17	0.0-2.9	3.0-8.0	.24	.37			
	39-61	27-33	1.30-1.40	0.20-0.60	0.13-0.16	3.0-5.9	0.5-3.0	.20	.37			
94:												
Povirt------------------	0-10	27-40	1.25-1.40	0.00-0.20	0.15-0.18	6.0-8.9	1.0-3.0	.43	.43	5	4	86
	10-20	27-50	1.25-1.40	0.00-0.20	0.15-0.18	6.0-8.9	1.0-3.0	.43	.43			
	20-60	40-60	1.25-1.40	0.00-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.37	.37			
95:												
Raldridge---------------	0-3	15-25	1.25-1.35	0.60-2.00	0.13-0.15	3.0-5.9	1.0-2.0	.32	.43	5	6	48
	3-14	27-35	1.35-1.45	0.20-0.60	0.14-0.16	3.0-5.9	1.0-2.0	.37	.43			
	14-22	27-31	1.35-1.45	0.20-0.60	0.10-0.12	3.0-5.9	1.0-2.0	.32	.37			
	22-60	15-20	1.25-1.35	2.00-6.00	0.06-0.08	0.0-2.9	0.5-1.0	.28	.37			
96:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
97:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
98:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Arbone------------------	0-15	13-18	1.30-1.50	0.60-2.00	0.14-0.17	0.0-2.9	1.0-3.0	.43	.49	5	5	56
	15-60	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
99:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Iphil-------------------	0-10	7-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	4L	86
	10-36	10-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	36-60	12-18	1.20-1.30	0.60-2.00	0.18-0.21	0.0-2.9	0.5-1.0	.49	.49			
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
100:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
101:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
102:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
102:												
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
103:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Kucera------------------	0-22	10-18	1.40-1.50	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	5	5	56
	22-42	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	42-60	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
104:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Thatcher----------------	0-7	16-25	1.35-1.45	0.60-2.00	0.17-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	7-35	28-35	1.35-1.45	0.20-0.60	0.15-0.18	0.0-2.9	1.0-2.0	.49	.49			
	35-60	12-25	1.35-1.50	0.60-2.00	0.11-0.17	0.0-2.9	0.5-1.0	.49	.49			
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
105:												
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
Lanoak------------------	0-30	10-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37	5	5	56
	30-49	12-20	1.12-1.35	0.60-2.00	0.19-0.21	0.0-2.9	3.0-5.0	.37	.37			
	49-60	18-27	1.25-1.55	0.60-2.00	0.19-0.21	3.0-5.9	1.0-3.0	.49	.49			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
106:												
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
107:												
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
108:												
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			
Lizdale-----------------	0-7	10-18	1.15-1.25	0.60-2.00	0.11-0.13	0.0-2.9	2.0-4.0	.17	.49	2	6	48
	7-10	10-18	1.25-1.35	2.00-6.00	0.08-0.10	0.0-2.9	1.0-3.0	.05	.15			
	10-36	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	36-52	3-25	1.40-1.50	1.98-5.95	0.10-0.14	0.0-2.9	0.0-0.5	.20	.20			
	52-60	3-10	1.15-1.30	2.00-20.00	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
109:												
Ridgecrest--------------	0-9	12-17	1.20-1.30	0.60-2.00	0.10-0.13	0.0-2.9	2.0-4.0	.20	.37	2	6	48
	9-13	12-17	1.20-1.30	0.60-2.00	0.13-0.17	0.0-2.9	2.0-4.0	.24	.37			
	13-31	12-17	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	1.0-3.0	.17	.43			
	31-35	8-16	1.50-1.60	2.00-6.00	0.03-0.05	0.0-2.9	0.5-1.0	.10	.32			
	35-45	---	---	0.00-0.14	---	---	---	---	---			
Hymas-------------------	0-2	10-15	1.25-1.35	0.60-2.00	0.13-0.16	0.0-2.9	2.0-3.0	.15	.43	1	8	0
	2-7	10-18	1.35-1.45	0.60-2.00	0.09-0.12	0.0-2.9	1.0-2.0	.17	.43			
	7-11	10-18	1.35-1.45	0.60-2.00	0.07-0.11	0.0-2.9	0.5-1.0	.10	.43			
	11-21	---	---	0.00-0.14	---	---	---	---	---			
110:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Buist-------------------	0-15	13-18	1.35-1.55	0.60-2.00	0.12-0.15	0.0-2.9	0.5-1.0	.32	.49	2	6	48
	15-28	16-23	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-3.0	.32	.43			
	28-60	5-10	1.45-1.55	0.57-6.00	0.05-0.09	0.0-2.9	0.5-1.0	.05	.37			
111:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	6	48
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
112:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Cedarhill---------------	0-7	15-27	1.20-1.35	0.57-1.98	0.10-0.12	0.0-2.9	2.0-3.0	.20	.37	5	6	48
	7-12	18-24	1.30-1.40	0.60-2.00	0.11-0.14	3.0-5.9	0.5-1.0	.32	.43			
	12-27	10-17	1.30-1.40	0.60-2.00	0.10-0.13	0.0-2.9	1.0-2.0	.17	.43			
	27-60	2-18	1.20-2.00	0.57-5.95	0.03-0.08	0.0-3.0	1.0-2.0	.15	.24			
113:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Hondoho-----------------	0-14	12-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	2.0-3.0	.20	.37	3	6	48
	14-28	15-25	1.20-1.30	0.60-2.00	0.13-0.15	3.0-5.9	1.0-3.0	.20	.37			
	28-60	5-19	1.35-1.50	2.00-6.00	0.04-0.07	0.0-2.9	0.0-1.0	.05	.28			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
114:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Iphil-------------------	0-10	7-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	4L	86
	10-36	10-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	36-60	12-18	1.20-1.30	0.60-2.00	0.18-0.21	0.0-2.9	0.5-1.0	.49	.49			
Kucera------------------	0-22	10-18	1.40-1.50	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	5	5	56
	22-42	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	42-60	10-18	1.40-1.55	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
115:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-60	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Iphil-------------------	0-10	7-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	4L	86
	10-36	10-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-2.0	.49	.49			
	36-60	12-18	1.20-1.30	0.60-2.00	0.18-0.21	0.0-2.9	0.5-1.0	.49	.49			
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
116:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Rexburg-----------------	0-14	12-18	1.20-1.35	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	14-22	14-18	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.49	.49			
	22-60	10-16	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
117:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
118:												
Ririe-------------------	0-14	15-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	5	5	56
	14-63	12-18	1.50-1.60	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.55	.55			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
118:												
Watercanyon-------------	0-5	10-18	1.15-1.25	0.60-2.00	0.16-0.20	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	5-33	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
	33-62	5-16	1.20-1.40	0.60-2.00	0.14-0.18	0.0-2.9	0.5-1.0	.55	.55			
119:												
Samaria-----------------	0-5	17-23	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	2	4L	86
	5-16	17-23	1.30-1.40	0.60-2.00	0.13-0.18	0.0-2.9	1.0-3.0	.32	.49			
	16-27	18-23	1.30-1.40	0.60-2.00	0.13-0.15	0.0-2.9	0.5-1.0	.28	.43			
	27-64	17-23	1.40-1.50	2.00-6.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.32			
120:												
Samaria-----------------	0-5	17-23	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	2	4L	86
	5-16	17-23	1.30-1.40	0.60-2.00	0.13-0.18	0.0-2.9	1.0-3.0	.32	.49			
	16-27	18-23	1.30-1.40	0.60-2.00	0.13-0.15	0.0-2.9	0.5-1.0	.28	.43			
	27-64	17-23	1.40-1.50	2.00-6.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.32			
121:												
Samaria-----------------	0-5	17-23	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	2	4L	86
	5-16	17-23	1.30-1.40	0.60-2.00	0.13-0.18	0.0-2.9	1.0-3.0	.32	.49			
	16-27	18-23	1.30-1.40	0.60-2.00	0.13-0.15	0.0-2.9	0.5-1.0	.28	.43			
	27-64	17-23	1.40-1.50	2.00-6.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.32			
Pollynot----------------	0-7	15-24	1.25-1.35	0.60-2.00	0.19-0.21	3.0-5.9	1.0-4.0	.37	.37	4	6	48
	7-17	18-26	1.25-1.35	0.60-2.00	0.19-0.21	3.0-5.9	1.0-4.0	.37	.37			
	17-41	13-18	1.30-1.50	0.60-2.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.32			
	41-56	10-15	1.45-1.55	6.00-20.00	0.05-0.07	0.0-2.9	1.0-3.0	.15	.20			
	56-60	7-12	1.20-1.40	0.57-1.98	0.04-0.06	0.0-2.9	0.5-1.0	.05	.37			
122:												
Samaria-----------------	0-5	17-23	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.43	.43	2	4L	86
	5-16	17-23	1.30-1.40	0.60-2.00	0.13-0.18	0.0-2.9	1.0-3.0	.32	.49			
	16-27	18-23	1.30-1.40	0.60-2.00	0.13-0.15	0.0-2.9	0.5-1.0	.28	.43			
	27-64	17-23	1.40-1.50	2.00-6.00	0.07-0.10	0.0-2.9	0.0-0.5	.17	.32			
Sterling----------------	0-13	10-20	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	2.0-4.0	.15	.37	5	6	48
	13-66	10-22	1.30-1.40	0.60-2.00	0.05-0.11	0.0-2.9	0.5-3.0	.10	.37			
123:												
Sterling----------------	0-13	10-20	1.30-1.40	0.60-2.00	0.08-0.11	0.0-2.9	2.0-4.0	.15	.37	5	6	48
	13-66	10-22	1.30-1.40	0.60-2.00	0.05-0.11	0.0-2.9	0.5-3.0	.10	.37			
124:												
Thatcher----------------	0-7	16-25	1.35-1.45	0.60-2.00	0.17-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	7-35	28-35	1.35-1.45	0.20-0.60	0.15-0.18	0.0-2.9	1.0-2.0	.49	.49			
	35-60	12-25	1.35-1.50	0.60-2.00	0.11-0.17	0.0-2.9	0.5-1.0	.49	.49			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (K_{sat})	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
125:												
Thatcher----------------	0-7	16-25	1.35-1.45	0.60-2.00	0.17-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	7-35	28-35	1.35-1.45	0.20-0.60	0.15-0.18	0.0-2.9	1.0-2.0	.49	.49			
	35-60	12-25	1.35-1.50	0.60-2.00	0.11-0.17	0.0-2.9	0.5-1.0	.49	.49			
Jensen------------------	0-12	14-22	1.20-1.40	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	5	5	56
	12-45	18-25	1.20-1.40	0.60-2.00	0.15-0.18	3.0-5.9	1.0-2.0	.28	.43			
	45-60	14-22	1.30-1.40	0.60-2.00	0.05-0.10	0.0-2.9	0.5-1.0	.17	.49			
126:												
Freedom-----------------	0-13	18-27	1.10-1.15	0.60-2.00	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43	5	4L	86
	13-34	18-27	1.15-1.25	0.60-2.00	0.17-0.19	3.0-5.9	1.0-3.0	.43	.43			
	34-60	15-35	1.15-1.25	0.60-2.00	0.16-0.18	3.0-5.9	0.5-1.0	.49	.49			
127:												
Tickason----------------	0-10	10-14	1.50-1.60	0.60-2.00	0.15-0.17	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-23	10-18	1.45-1.55	0.60-2.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28			
	23-31	10-18	1.45-1.55	0.60-2.00	0.15-0.18	0.0-2.9	0.5-1.0	.28	.28			
	31-38	10-18	1.40-1.50	0.60-2.00	0.16-0.18	0.0-2.9	0.5-1.0	.32	.32			
	38-60	10-18	1.45-1.55	0.60-2.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28			
128:												
Tickason----------------	0-10	10-14	1.50-1.60	0.60-2.00	0.15-0.17	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-23	10-18	1.45-1.55	0.60-2.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28			
	23-31	10-18	1.45-1.55	0.60-2.00	0.15-0.18	0.0-2.9	0.5-1.0	.28	.28			
	31-38	10-18	1.40-1.50	0.60-2.00	0.16-0.18	0.0-2.9	0.5-1.0	.32	.32			
	38-60	10-18	1.45-1.55	0.60-2.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28			
129:												
Tirod-------------------	0-18	18-27	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32	5	6	48
	18-30	18-27	1.20-1.30	0.60-2.00	0.19-0.21	3.0-5.9	2.0-4.0	.32	.32			
	30-40	22-35	1.35-1.45	0.20-0.60	0.18-0.20	3.0-5.9	1.0-3.0	.32	.43			
	40-62	20-27	1.30-1.50	0.60-2.00	0.17-0.20	3.0-5.9	0.5-1.0	.37	.43			
130:												
Toefoot-----------------	0-26	13-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-5.0	.43	.43	4	5	56
	26-33	13-17	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43			
	33-40	13-17	1.30-1.50	0.60-6.00	0.07-0.13	0.0-2.9	1.0-3.0	.15	.32			
	40-62	13-17	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-1.0	.43	.43			
131:												
Welby-------------------	0-11	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-3.0	.43	.43	5	4L	86
	11-36	10-18	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.5-3.0	.43	.43			
	36-60	5-18	1.30-1.40	2.00-6.00	0.13-0.15	0.0-2.9	0.5-1.0	.37	.37			

Table 14.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (K_{sat})	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*					
131:												
Parleys------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	2.0-4.0	.37	.37	2	6	48
	5-26	27-35	1.20-1.40	0.20-0.60	0.19-0.21	3.0-5.9	1.0-3.0	.43	.43			
	26-64	18-27	1.20-1.30	0.60-2.00	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
132:												
Wursten------------------	0-16	13-18	1.20-1.45	0.60-2.00	0.13-0.17	0.0-2.9	1.0-2.0	.32	.43	5	4L	86
	16-60	13-18	1.30-1.40	0.60-2.00	0.11-0.16	0.0-2.9	0.0-1.0	.28	.49			
133:												
Yago---------------------	0-10	27-32	1.40-1.50	0.06-0.20	0.13-0.15	3.0-5.9	2.0-4.0	.17	.37	5	8	0
	10-40	32-40	1.30-1.40	0.06-0.20	0.09-0.11	6.0-8.9	1.0-3.0	.20	.37			
	40-60	23-34	1.40-1.50	0.06-0.20	0.15-0.18	3.0-5.9	1.0-3.0	.20	.43			
Manila-------------------	0-5	18-27	1.20-1.30	0.60-2.00	0.16-0.18	3.0-5.9	2.0-4.0	.43	.43	5	6	48
	5-19	35-40	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	19-45	35-55	1.35-1.45	0.06-0.20	0.17-0.19	6.0-8.9	1.0-3.0	.37	.37			
	45-60	12-18	1.20-1.30	0.60-2.00	0.17-0.19	0.0-2.9	0.0-0.5	.49	.49			
134:												
Water--------------------	---	---	---	---	---	---	---	---	---	-	---	---

Table 15.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
1:								
Araveton-------------	0-8	10-25	---	6.6-7.8	0	0	0	0
	8-36	10-20	---	7.4-7.8	0-20	0	0.0-2.0	0
	36-62	10-15	---	7.4-8.4	15-35	0	0.0-2.0	0-5
Hades----------------	0-20	10-20	---	6.6-7.3	0	0	0	0
	20-42	20-30	---	6.6-7.8	0	0	0	0
	42-60	15-25	---	6.6-7.8	0-5	0	0	0
2:								
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
3:								
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
4:								
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
5:								
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
6:								
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
7:								
Bayhook--------------	0-7	4.0-15	---	7.9-9.0	5-10	0	2.0-8.0	0
	7-13	5.0-10	---	7.9-9.0	5-20	0	2.0-8.0	5-25
	13-60	3.0-10	---	8.5-9.0	15-30	0	4.0-8.0	13-30
8:								
Bayhook--------------	0-7	4.0-15	---	7.9-9.0	5-10	0	2.0-8.0	0
	7-13	5.0-10	---	7.9-9.0	5-20	0	2.0-8.0	5-25
	13-60	3.0-10	---	8.5-9.0	15-30	0	4.0-8.0	13-30

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
8:								
Ecur-----------------	0-15	7.0-15	---	7.9-9.0	20-35	0	0.0-4.0	0-13
	15-37	3.0-15	---	8.5-11.0	30-45	0	0.0-2.0	13-30
	37-44	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	44-49	2.0-7.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	49-60	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
9:								
Bingham--------------	0-6	8.0-20	---	6.6-7.3	0	0	0	0
	6-27	10-20	---	6.6-7.8	0-10	0	0	0
	27-38	6.0-15	---	7.4-8.4	15-35	0	0	0
	38-45	3.0-8.0	---	7.4-8.4	15-35	0	0	0
	45-65	3.0-8.0	---	7.4-8.4	15-35	0	0	0
10:								
Bingham--------------	0-6	8.0-20	---	6.6-7.3	0	0	0	0
	6-27	10-20	---	6.6-7.8	0-10	0	0	0
	27-38	6.0-15	---	7.4-8.4	15-35	0	0	0
	38-45	3.0-8.0	---	7.4-8.4	15-35	0	0	0
	45-65	3.0-8.0	---	7.4-8.4	15-35	0	0	0
Tirod----------------	0-18	10-25	---	6.6-7.8	0	0	0	0
	18-30	10-30	---	6.6-8.4	0	0	0	0
	30-40	10-30	---	6.6-8.4	0	0	0	0
	40-62	10-15	---	7.9-8.4	15-25	0	0	0
11:								
Bloor----------------	0-12	10-20	---	7.9-9.0	0	0	8.0-16.0	13-30
	12-20	15-30	---	7.9-9.0	0-5	0	4.0-32.0	13-30
	20-29	5.0-15	---	8.5-9.5	1-10	0	8.0-32.0	13-30
	29-47	5.0-15	---	8.5-9.5	1-10	0	8.0-32.0	13-30
	47-60	5.0-15	---	8.5-9.5	1-5	0	8.0-32.0	13-30
Brinnum--------------	0-9	8.0-20	---	9.1-9.6	15-35	0	2.0-8.0	5-15
	9-31	8.0-20	---	9.1-9.6	25-35	0	16.0-32.0	50-100
	31-60	7.0-20	---	8.5-9.6	25-45	0	16.0-32.0	40-90
12:								
Bothwell-------------	0-9	10-20	---	6.6-7.8	0	0	0.0-2.0	0
	9-20	10-20	---	6.6-7.8	0	0	0.0-2.0	0
	20-45	15-25	---	6.6-8.4	0	0	0.0-2.0	0
	45-60	10-20	---	6.6-8.4	5-15	0	0.0-2.0	0
13:								
Bothwell-------------	0-9	10-20	---	6.6-7.8	0	0	0.0-2.0	0
	9-20	10-20	---	6.6-7.8	0	0	0.0-2.0	0
	20-45	15-25	---	6.6-8.4	0	0	0.0-2.0	0
	45-60	10-20	---	6.6-8.4	5-15	0	0.0-2.0	0
Hades----------------	0-20	10-20	---	6.6-7.3	0	0	0	0
	20-42	20-30	---	6.6-7.8	0	0	0	0
	42-60	15-25	---	6.6-7.8	0-5	0	0	0
Justesen-------------	0-8	7.0-20	---	6.6-7.3	0	0	0	0
	8-16	10-30	---	6.6-7.3	0	0	0	0
	16-27	10-30	---	6.6-7.8	0	0	0	0
	27-45	8.0-20	---	7.4-8.4	5-20	0	0	0
	45-60	8.0-20	---	7.4-8.4	5-20	0	0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
14:								
Brinnum--------------	0-9	8.0-20	---	9.1-9.6	15-35	0	2.0-8.0	5-15
	9-31	8.0-20	---	9.1-9.6	25-35	0	16.0-32.0	50-100
	31-60	7.0-20	---	8.5-9.6	25-45	0	16.0-32.0	40-90
Logan----------------	0-4	---	20-30	4.5-5.5	0	0	0	0
	4-22	15-30	---	7.9-9.0	5-20	0	0.0-2.0	5-15
	22-64	10-25	---	7.9-9.0	15-35	0	0.0-2.0	5-15
Langless-------------	0-3	---	20-30	4.5-5.5	0	0	0	0
	3-9	1.0-20	---	7.9-9.0	20-40	0	4.0-8.0	10-15
	9-47	8.0-20	---	7.9-9.0	40-65	0	4.0-8.0	10-15
	47-63	7.0-15	---	7.9-8.4	15-35	0	4.0-8.0	5-10
15:								
Buckboard------------	0-15	15-20	---	7.4-7.8	0	0	0	0
	15-50	10-25	---	7.4-8.4	0	0	0	0
	50-65	10-20	---	7.9-8.4	5-10	0	0	0
16:								
Buist----------------	0-15	5.0-15	---	7.4-7.8	0	0	0.0-2.0	0-5
	15-28	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
	28-60	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
17:								
Calpac---------------	0-8	10-20	---	6.6-7.3	0	0	0	0
	8-15	8.0-20	---	6.6-7.3	0	0	0	0
	15-23	9.0-20	---	7.4-7.8	0	0	0	0
	23-60	9.0-20	---	7.4-8.4	5-14	0	0.0-2.0	0
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Ireland--------------	0-8	8.0-20	---	6.6-7.8	0	0	0	0
	8-28	8.0-20	---	7.4-8.4	5-25	0	0.0-2.0	0
	28-38	---	---	---	---	---	---	---
18:								
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
19:								
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
20:								
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
21:								
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
Lostine--------------	0-7	12-20	---	6.1-7.8	0	0	0	0
	7-45	8.0-18	---	6.6-7.8	0	0	0	0
	45-60	8.0-20	---	6.6-7.8	0	0	0	0
22:								
Collinston-----------	0-12	10-20	---	7.4-9.0	10-20	0	0	0-5
	12-20	10-25	---	7.4-9.0	30-40	0	0.0-2.0	0-5
	20-60	10-15	---	7.4-9.0	15-30	0	0.0-2.0	0-5
23:								
Collinston-----------	0-12	10-20	---	7.4-9.0	10-20	0	0	0-5
	12-20	10-25	---	7.4-9.0	30-40	0	0.0-2.0	0-5
	20-60	10-15	---	7.4-9.0	15-30	0	0.0-2.0	0-5
Kearns---------------	0-8	10-20	---	7.4-8.4	0	0	0	0
	8-32	10-20	---	7.4-8.4	0-5	0	0	0
	32-67	5.0-15	---	7.9-9.0	5-25	0	0.0-2.0	0-5
24:								
Copenhagen-----------	0-6	10-20	---	6.6-7.8	0-5	0	0	0
	6-14	10-20	---	6.6-7.8	0-5	0	0	0
	14-24	---	---	---	---	---	---	---
Lonigan--------------	0-11	30-40	---	7.4-8.4	0	0	0	0
	11-16	10-40	---	7.4-8.4	5-15	0	0	0
	16-33	5.0-40	---	7.4-8.4	15-35	0	2.0-4.0	0
	33-43	---	---	---	---	---	---	---
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
25:								
Darkbull-------------	0-10	5.0-13	---	7.9-9.0	0-15	0	0.0-2.0	0-5
	10-43	3.0-10	---	8.5-9.0	10-25	0	2.0-4.0	10-30
	43-60	3.0-10	---	8.5-9.0	10-25	0	2.0-4.0	5-13
Pyrat----------------	0-14	7.0-15	---	7.9-9.0	5-10	0	0.0-2.0	0
	14-25	4.0-13	---	7.9-9.0	10-30	0	0.0-2.0	0
	25-33	4.0-13	---	7.9-9.0	10-30	0	0.0-2.0	0
	33-43	4.0-13	---	7.9-9.0	10-30	0	0.0-2.0	0
	43-65	2.0-7.0	---	8.5-9.6	10-30	0	2.0-4.0	0
Ecur-----------------	0-15	7.0-15	---	7.9-9.0	20-35	0	0.0-4.0	0-13
	15-37	3.0-15	---	8.5-11.0	30-45	0	0.0-2.0	13-30
	37-44	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	44-49	2.0-7.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	49-60	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
26:								
DeJarnet-------------	0-3	10-25	---	6.6-7.8	0	0	0	0
	3-27	10-25	---	7.4-8.4	0	0	0	0
	27-41	10-20	---	7.4-8.4	5-15	0	0	0
	41-62	8.0-10	---	7.4-9.0	10-25	0	0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
27:								
Dumps, mine----------	---	---	---	---	---	---	---	---
28:								
Ecur-----------------	0-15	7.0-15	---	7.9-9.0	20-35	0	0.0-4.0	0-13
	15-37	3.0-15	---	8.5-11.0	30-45	0	0.0-2.0	13-30
	37-44	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	44-49	2.0-7.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	49-60	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
29:								
Ecur-----------------	0-15	7.0-15	---	7.9-9.0	20-35	0	0.0-4.0	0-13
	15-37	3.0-15	---	8.5-11.0	30-45	0	0.0-2.0	13-30
	37-44	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	44-49	2.0-7.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
	49-60	1.0-5.0	---	8.5-11.0	20-35	0-3	0.0-2.0	13-30
Darkbull-------------	0-10	5.0-13	---	7.9-9.0	0-15	0	0.0-2.0	0-5
	10-43	3.0-10	---	8.5-9.0	10-25	0	2.0-4.0	10-30
	43-60	3.0-10	---	8.5-9.0	10-25	0	2.0-4.0	5-13
30:								
Elevator-------------	0-10	12-25	---	7.4-7.8	0	0	0.0-2.0	0
	10-32	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	32-60	15-25	---	7.9-8.4	15-35	0	0.0-2.0	0-5
31:								
Elevator-------------	0-10	12-25	---	7.4-7.8	0	0	0.0-2.0	0
	10-32	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	32-60	15-25	---	7.9-8.4	15-35	0	0.0-2.0	0-5
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
32:								
Elevator-------------	0-10	12-25	---	7.4-7.8	0	0	0.0-2.0	0
	10-32	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	32-60	15-25	---	7.9-8.4	15-35	0	0.0-2.0	0-5
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
33:								
Fridlo---------------	0-7	15-25	---	7.9-8.4	0-5	0	2.0-4.0	0-5
	7-24	20-30	---	7.9-9.0	0-10	0	4.0-8.0	15-25
	24-39	15-25	---	7.9-9.0	15-25	0	4.0-16.0	10-30
	39-60	10-20	---	7.9-9.0	20-35	0	8.0-16.0	10-20
34:								
Goosenawt------------	0-24	10-20	---	7.4-8.4	0	0	0	0
	24-58	15-25	---	7.4-7.8	0-5	0	0	0
	58-64	10-20	---	7.4-8.4	0-5	0	0	0
	64-74	10-20	---	7.4-8.4	0-5	0	0	0
35:								
Hans-----------------	0-10	10-20	---	7.4-8.4	0	0	0	0
	10-26	15-25	---	7.4-8.4	0-5	0	0	0
	26-60	10-25	---	7.9-9.0	15-25	0	0.0-2.0	0-5

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
36:								
Highcreek------------	0-7	10-25	---	7.4-8.4	0	0	0	0
	7-26	10-20	---	7.4-8.4	0-10	0	0	0
	26-66	10-20	---	7.4-8.4	10-30	0	0	0
Sterling-------------	0-13	8.0-20	---	7.4-8.4	5-15	0	0	0-5
	13-66	6.0-20	---	7.4-8.4	10-40	0	0	0-5
37:								
Highcreek------------	0-7	10-25	---	7.4-8.4	0	0	0	0
	7-26	10-20	---	7.4-8.4	0-10	0	0	0
	26-66	10-20	---	7.4-8.4	10-30	0	0	0
Sterling-------------	0-13	8.0-20	---	7.4-8.4	5-15	0	0	0-5
	13-66	6.0-20	---	7.4-8.4	10-40	0	0	0-5
38:								
Hillfield------------	0-7	6.0-15	---	7.4-8.4	5-10	0	0	0
	7-16	6.0-15	---	7.4-8.4	15-30	0	0	0
	16-60	4.0-10	---	7.4-8.4	10-25	0	0	0
Kucera---------------	0-22	8.0-20	---	6.6-8.4	0	0	0	0
	22-42	6.0-15	---	6.6-8.4	0-10	0	0	0
	42-60	5.0-10	---	7.4-9.0	5-15	0	0.0-2.0	0
39:								
Hillfield------------	0-7	6.0-15	---	7.4-8.4	5-10	0	0	0
	7-16	6.0-15	---	7.4-8.4	15-30	0	0	0
	16-60	4.0-10	---	7.4-8.4	10-25	0	0	0
Kucera---------------	0-22	8.0-20	---	6.6-8.4	0	0	0	0
	22-42	6.0-15	---	6.6-8.4	0-10	0	0	0
	42-60	5.0-10	---	7.4-9.0	5-15	0	0.0-2.0	0
40:								
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Calpac---------------	0-8	10-20	---	6.6-7.3	0	0	0	0
	8-15	8.0-20	---	6.6-7.3	0	0	0	0
	15-23	9.0-20	---	7.4-7.8	0	0	0	0
	23-60	9.0-20	---	7.4-8.4	5-14	0	0.0-2.0	0
Lizdale--------------	0-7	8.0-20	---	7.4-7.8	5-15	0	0	0
	7-10	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	10-36	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	36-52	5.0-15	---	7.4-9.0	20-45	0	0	0-5
	52-60	5.0-15	---	7.4-9.0	20-45	0	0.0-4.0	0-5
41:								
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
41:								
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
42:								
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
43:								
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Hades----------------	0-20	10-20	---	6.6-7.3	0	0	0	0
	20-42	20-30	---	6.6-7.8	0	0	0	0
	42-60	15-25	---	6.6-7.8	0-5	0	0	0
44:								
Hutchley-------------	0-6	10-20	---	6.6-7.8	0	0	0	0
	6-13	10-25	---	6.6-7.8	0	0	0	0
	13-23	---	---	---	---	---	---	---
McCarey--------------	0-8	11-25	---	6.6-7.8	0	0	0	0
	8-15	12-30	---	6.6-7.8	0	0	0	0
	15-19	12-30	---	6.6-7.8	5-10	0	0	0
	19-23	9.0-25	---	7.4-7.8	15-25	0	0	0
	23-33	---	---	---	---	---	---	---
Araveton-------------	0-8	10-25	---	6.6-7.8	0	0	0	0
	8-36	10-20	---	7.4-7.8	0-20	0	0.0-2.0	0
	36-62	10-15	---	7.4-8.4	15-35	0	0.0-2.0	0-5
45:								
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
45:								
Calpac----------------	0-8	10-20	---	6.6-7.3	0	0	0	0
	8-15	8.0-20	---	6.6-7.3	0	0	0	0
	15-23	9.0-20	---	7.4-7.8	0	0	0	0
	23-60	9.0-20	---	7.4-8.4	5-14	0	0.0-2.0	0
Ireland---------------	0-8	8.0-20	---	6.6-7.8	0	0	0	0
	8-28	8.0-20	---	7.4-8.4	5-25	0	0.0-2.0	0
	28-38	---	---	---	---	---	---	---
46:								
Hymas-----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
Northwater------------	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-20	10-20	---	6.6-7.8	0	0	0	0
	20-31	8.0-20	---	6.6-7.8	0	0	0	0
	31-37	8.0-20	---	6.6-7.8	0	0	0	0
	37-62	8.0-20	---	6.6-7.8	0	0	0	0
Clayburn--------------	0-4	8.0-20	---	6.6-7.3	0	0	0	0
	4-21	6.0-20	---	6.6-7.3	0	0	0	0
	21-39	13-25	---	6.6-7.3	0	0	0	0
	39-60	13-25	---	6.6-7.3	0	0	0	0
47:								
Hymas-----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
Povey-----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
48:								
Hymas-----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
Povey-----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
Pavohroo--------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
49:								
Inkom-----------------	0-6	11-25	---	7.4-8.4	20-35	0	0.0-4.0	0-5
	6-32	11-25	---	7.4-8.4	20-45	0	0.0-4.0	0-5
	32-60	11-25	---	7.4-8.4	20-45	0	0.0-4.0	0-5

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
50:								
Iphil----------------	0-10	7.0-15	---	7.4-9.0	5-15	0	0.0-2.0	0
	10-36	6.0-15	---	7.4-9.0	15-35	0	0.0-2.0	0-8
	36-60	6.0-15	---	7.4-9.0	10-15	0	0.0-2.0	5-15
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
51:								
Ireland--------------	0-8	8.0-20	---	6.6-7.8	0	0	0	0
	8-28	8.0-20	---	7.4-8.4	5-25	0	0.0-2.0	0
	28-38	---	---	---	---	---	---	---
Calpac---------------	0-8	10-20	---	6.6-7.3	0	0	0	0
	8-15	8.0-20	---	6.6-7.3	0	0	0	0
	15-23	9.0-20	---	7.4-7.8	0	0	0	0
	23-60	9.0-20	---	7.4-8.4	5-14	0	0.0-2.0	0
52:								
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
53:								
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
54:								
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
Iphil----------------	0-10	7.0-15	---	7.4-9.0	5-15	0	0.0-2.0	0
	10-36	6.0-15	---	7.4-9.0	15-35	0	0.0-2.0	0-8
	36-60	6.0-15	---	7.4-9.0	10-15	0	0.0-2.0	5-15
Wursten--------------	0-14	7.0-15	---	7.4-8.4	5-15	0	0.0-2.0	0
	14-60	6.0-10	---	7.9-9.0	10-30	0	2.0-4.0	5-12
55:								
Jovine---------------	0-7	10-20	---	6.6-7.8	0	0	0	0
	7-60	10-30	---	6.6-7.8	0	0	0	0
56:								
Justesen-------------	0-8	7.0-20	---	6.6-7.3	0	0	0	0
	8-16	10-30	---	6.6-7.3	0	0	0	0
	16-27	10-30	---	6.6-7.8	0	0	0	0
	27-45	8.0-20	---	7.4-8.4	5-20	0	0	0
	45-60	8.0-20	---	7.4-8.4	5-20	0	0	0
57:								
Justesen-------------	0-8	7.0-20	---	6.6-7.3	0	0	0	0
	8-16	10-30	---	6.6-7.3	0	0	0	0
	16-27	10-30	---	6.6-7.8	0	0	0	0
	27-45	8.0-20	---	7.4-8.4	5-20	0	0	0
	45-60	8.0-20	---	7.4-8.4	5-20	0	0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
58:								
Justesen-------------	0-8	7.0-20	---	6.6-7.3	0	0	0	0
	8-16	10-30	---	6.6-7.3	0	0	0	0
	16-27	10-30	---	6.6-7.8	0	0	0	0
	27-45	8.0-20	---	7.4-8.4	5-20	0	0	0
	45-60	8.0-20	---	7.4-8.4	5-20	0	0	0
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Buist----------------	0-15	5.0-15	---	7.4-7.8	0	0	0.0-2.0	0-5
	15-28	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
	28-60	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
59:								
Kearns---------------	0-8	10-20	---	7.4-8.4	0	0	0	0
	8-32	10-20	---	7.4-8.4	0-5	0	0	0
	32-67	5.0-15	---	7.9-9.0	5-25	0	0.0-2.0	0-5
60:								
Kearns---------------	0-8	10-20	---	7.4-8.4	0	0	0	0
	8-32	10-20	---	7.4-8.4	0-5	0	0	0
	32-67	5.0-15	---	7.9-9.0	5-25	0	0.0-2.0	0-5
61:								
Kidman---------------	0-17	5.0-15	---	6.6-7.8	0	0	0	0
	17-38	5.0-15	---	6.6-7.8	0	0	0	0
	38-66	5.0-15	---	7.9-9.0	15-30	0	0.0-2.0	3-8
62:								
Kidman---------------	0-17	5.0-15	---	6.6-7.8	0	0	0	0
	17-38	5.0-15	---	6.6-7.8	0	0	0	0
	38-66	5.0-15	---	7.9-9.0	15-30	0	0.0-2.0	3-8
Preston--------------	0-3	2.0-7.0	---	6.6-7.8	0	0	0.0-2.0	0-10
	3-65	1.0-5.0	---	6.6-7.8	0-15	0	0.0-2.0	0-10
63:								
Kucera---------------	0-22	8.0-20	---	6.6-8.4	0	0	0	0
	22-42	6.0-15	---	6.6-8.4	0-10	0	0	0
	42-60	5.0-10	---	7.4-9.0	5-15	0	0.0-2.0	0
64:								
Lagonot--------------	0-10	10-20	---	7.4-9.0	5-15	0	0	0-5
	10-60	10-20	---	8.5-9.5	15-35	0	2.0-4.0	5-10
65:								
Langless-------------	0-3	---	20-30	4.5-5.5	0	0	0	0
	3-9	1.0-20	---	7.9-9.0	20-40	0	4.0-8.0	10-15
	9-47	8.0-20	---	7.9-9.0	40-65	0	4.0-8.0	10-15
	47-63	7.0-15	---	7.9-8.4	15-35	0	4.0-8.0	5-10
66:								
Langless-------------	0-3	---	20-30	4.5-5.5	0	0	0	0
	3-9	1.0-20	---	7.9-9.0	20-40	0	4.0-8.0	10-15
	9-47	8.0-20	---	7.9-9.0	40-65	0	4.0-8.0	10-15
	47-63	7.0-15	---	7.9-8.4	15-35	0	4.0-8.0	5-10
Logan----------------	0-4	---	20-30	4.5-5.5	0	0	0	0
	4-22	15-30	---	7.9-9.0	5-20	0	0.0-2.0	5-15
	22-64	10-25	---	7.9-9.0	15-35	0	0.0-2.0	5-15

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
67:								
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
68:								
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
69:								
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
70:								
Logan----------------	0-4	---	20-30	4.5-5.5	0	0	0	0
	4-22	15-30	---	7.9-9.0	5-20	0	0.0-2.0	5-15
	22-64	10-25	---	7.9-9.0	15-35	0	0.0-2.0	5-15
71:								
Lonigan--------------	0-11	30-40	---	7.4-8.4	0	0	0	0
	11-16	10-40	---	7.4-8.4	5-15	0	0	0
	16-33	5.0-40	---	7.4-8.4	15-35	0	2.0-4.0	0
	33-43	---	---	---	---	---	---	---
Lizdale--------------	0-7	8.0-20	---	7.4-7.8	5-15	0	0	0
	7-10	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	10-36	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	36-52	5.0-15	---	7.4-9.0	20-45	0	0	0-5
	52-60	5.0-15	---	7.4-9.0	20-45	0	0.0-4.0	0-5
72:								
Lostine--------------	0-7	12-20	---	6.1-7.8	0	0	0	0
	7-45	8.0-18	---	6.6-7.8	0	0	0	0
	45-60	8.0-20	---	6.6-7.8	0	0	0	0
73:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
74:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Broadhead------------	0-9	11-25	---	6.6-7.3	0	0	0	0
	9-15	25-40	---	6.6-7.8	0	0	0	0
	15-36	25-40	---	6.6-7.8	0	0	0	0
	36-41	25-40	---	6.6-7.8	0	0	0	0
	41-60	25-40	---	6.6-7.8	0-5	0	0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
75:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Broadhead------------	0-9	11-25	---	6.6-7.3	0	0	0	0
	9-15	25-40	---	6.6-7.8	0	0	0	0
	15-36	25-40	---	6.6-7.8	0	0	0	0
	36-41	25-40	---	6.6-7.8	0	0	0	0
	41-60	25-40	---	6.6-7.8	0-5	0	0	0
76:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Lonigan--------------	0-11	30-40	---	7.4-8.4	0	0	0	0
	11-16	10-40	---	7.4-8.4	5-15	0	0	0
	16-33	5.0-40	---	7.4-8.4	15-35	0	2.0-4.0	0
	33-43	---	---	---	---	---	---	---
77:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Obnot----------------	0-5	15-30	---	6.1-7.3	0	0	0	0
	5-31	20-40	---	6.1-7.8	0-10	0	0	0
	31-34	20-40	---	6.1-7.8	0-10	0	0	0
	34-60	15-30	---	7.4-8.4	5-15	0	0	0
78:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Yago-----------------	0-10	20-30	---	6.1-7.3	0	0	0	0
	10-40	20-35	---	6.1-7.3	0-10	0	0	0
	40-60	10-30	---	6.6-7.8	15-25	0	0	0
79:								
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
Yago-----------------	0-10	20-30	---	6.1-7.3	0	0	0	0
	10-40	20-35	---	6.1-7.3	0-10	0	0	0
	40-60	10-30	---	6.6-7.8	15-25	0	0	0
80:								
Mellor---------------	0-4	10-15	---	7.9-9.0	0-5	0	2.0-8.0	0-5
	4-16	15-25	---	8.5-9.0	10-15	0	8.0-16.0	15-25
	16-60	5.0-20	---	8.5-9.0	15-25	0	8.0-16.0	10-20
Freedom--------------	0-13	10-20	---	7.4-9.0	5-30	0	0.0-2.0	0-5
	13-34	10-20	---	7.9-9.0	15-40	0	2.0-4.0	5-13
	34-60	5.0-25	---	7.4-9.0	10-30	0	0.0-2.0	5-13

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
81:								
Neeley---------------	0-7	4.0-14	---	7.4-8.4	0	0	0.0-2.0	0
	7-14	4.0-15	---	7.9-9.0	0-30	0	0.0-2.0	5-20
	14-65	3.0-10	---	8.5-9.0	15-30	0	0.0-4.0	10-20
82:								
Northwater-----------	0-2	---	20-30	4.5-5.5	0	0	0	0
	2-20	10-20	---	6.6-7.8	0	0	0	0
	20-31	8.0-20	---	6.6-7.8	0	0	0	0
	31-37	8.0-20	---	6.6-7.8	0	0	0	0
	37-62	8.0-20	---	6.6-7.8	0	0	0	0
Povey----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
83:								
Parehat--------------	0-6	6.0-20	---	7.4-8.4	5-15	0	2.0-4.0	45-55
	6-52	8.0-15	---	7.4-8.4	10-15	0	2.0-4.0	45-55
	52-64	9.0-20	---	7.9-9.0	0-15	0	2.0-4.0	40-50
84:								
Parleys--------------	0-5	10-25	---	6.6-7.8	0	0	0.0-2.0	0
	5-26	10-30	---	6.6-8.4	0	0	0.0-2.0	0
	26-64	10-20	---	7.9-9.0	15-40	0	0.0-2.0	0-5
85:								
Parleys--------------	0-5	10-25	---	6.6-7.8	0	0	0.0-2.0	0
	5-26	10-30	---	6.6-8.4	0	0	0.0-2.0	0
	26-64	10-20	---	7.9-9.0	15-40	0	0.0-2.0	0-5
86:								
Parleys--------------	0-5	10-25	---	6.6-7.8	0	0	0.0-2.0	0
	5-26	10-30	---	6.6-8.4	0	0	0.0-2.0	0
	26-64	10-20	---	7.9-9.0	15-40	0	0.0-2.0	0-5
Welby----------------	0-11	8.0-15	---	7.9-9.0	5-20	0	0.0-2.0	5-15
	11-36	6.0-15	---	7.9-9.0	15-35	0	0.0-2.0	5-20
	36-60	3.0-13	---	7.9-9.0	10-30	0	0.0-2.0	5-20
87:								
Parleys--------------	0-5	10-25	---	6.6-7.8	0	0	0.0-2.0	0
	5-26	10-30	---	6.6-8.4	0	0	0.0-2.0	0
	26-64	10-20	---	7.9-9.0	15-40	0	0.0-2.0	0-5
Wheelon--------------	0-8	10-20	---	7.4-8.4	12-20	0	0.0-2.0	0
	8-14	10-20	---	7.9-9.0	20-35	0	0.0-2.0	0-15
	14-20	10-20	---	7.9-9.0	20-35	0	0.0-2.0	0-15
	20-45	10-20	---	7.9-9.0	20-35	0	0.0-2.0	0-15
	45-60	10-20	---	7.9-9.0	10-30	0	0.0-2.0	5-20

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
88:								
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
Povey----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
89:								
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
Stines---------------	0-13	5.0-15	---	6.6-7.8	0-5	0	0	0
	13-24	5.0-15	---	6.6-7.8	5-10	0	0	0
	24-44	4.0-10	---	7.4-8.4	10-20	0	0	0
	44-60	3.0-10	---	7.4-8.4	5-15	0	0	0
Lonigan--------------	0-11	30-40	---	7.4-8.4	0	0	0	0
	11-16	10-40	---	7.4-8.4	5-15	0	0	0
	16-33	5.0-40	---	7.4-8.4	15-35	0	2.0-4.0	0
	33-43	---	---	---	---	---	---	---
90:								
Pits, gravel---------	0-60	---	---	---	---	---	---	---
91:								
Povey----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
Hades----------------	0-20	10-20	---	6.6-7.3	0	0	0	0
	20-42	20-30	---	6.6-7.8	0	0	0	0
	42-60	15-25	---	6.6-7.8	0-5	0	0	0
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
92:								
Povey----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
Ireland--------------	0-8	8.0-20	---	6.6-7.8	0	0	0	0
	8-28	8.0-20	---	7.4-8.4	5-25	0	0.0-2.0	0
	28-38	---	---	---	---	---	---	---

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
92:								
Calpac---------------	0-8	10-20	---	6.6-7.3	0	0	0	0
	8-15	8.0-20	---	6.6-7.3	0	0	0	0
	15-23	9.0-20	---	7.4-7.8	0	0	0	0
	23-60	9.0-20	---	7.4-8.4	5-14	0	0.0-2.0	0
93:								
Povey----------------	0-5	12-30	---	6.1-7.3	0	0	0	0
	5-12	10-25	---	6.1-7.3	0	0	0	0
	12-20	10-25	---	6.1-7.3	0	0	0	0
	20-35	10-25	---	6.1-7.3	0	0	0	0
	35-60	4.0-15	---	6.1-7.3	0	0	0	0
Pavohroo-------------	0-1	---	20-30	4.5-5.5	0	0	0	0
	1-7	10-25	---	6.1-7.3	0	0	0	0
	7-16	15-25	---	6.1-7.3	0	0	0	0
	16-39	15-25	---	6.1-7.3	0	0	0	0
	39-61	20-25	---	6.6-8.4	0-5	0	0.0-2.0	0
94:								
Povirt---------------	0-10	15-30	---	7.9-8.4	5-20	0	0.0-2.0	0-8
	10-20	15-30	---	7.9-8.4	5-20	0	0.0-2.0	0-8
	20-60	30-50	---	7.9-9.0	5-20	0	0.0-2.0	10-30
95:								
Raldridge------------	0-3	15-20	---	7.4-7.8	0	0	0	0
	3-14	15-25	---	7.4-7.8	0	0	0	0
	14-22	10-20	---	7.9-8.4	0	0	0	0
	22-60	7.0-15	---	7.9-8.4	15-25	0	0	0
96:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
97:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
98:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Arbone---------------	0-15	7.0-15	---	7.4-8.4	0	0	0	0
	15-60	6.0-13	---	7.4-8.4	5-30	0	0	0
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
99:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
99:								
Iphil----------------	0-10	7.0-15	---	7.4-9.0	5-15	0	0.0-2.0	0
	10-36	6.0-15	---	7.4-9.0	15-35	0	0.0-2.0	0-8
	36-60	6.0-15	---	7.4-9.0	10-15	0	0.0-2.0	5-15
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
100:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
101:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
102:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
103:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Kucera---------------	0-22	8.0-20	---	6.6-8.4	0	0	0	0
	22-42	6.0-15	---	6.6-8.4	0-10	0	0	0
	42-60	5.0-10	---	7.4-9.0	5-15	0	0.0-2.0	0
104:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Thatcher-------------	0-7	5.0-15	---	6.6-8.4	0	0	0.0-2.0	0
	7-35	11-21	---	6.6-8.4	0	0	0.0-2.0	0
	35-60	5.0-15	---	7.4-9.0	15-25	0	0.0-2.0	0

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
104:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
105:								
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
Lanoak---------------	0-30	10-20	---	6.1-7.8	0	0	0	0
	30-49	10-20	---	6.1-7.8	0	0	0	0
	49-60	10-25	---	6.6-8.4	0-15	0	0	0
106:								
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
107:								
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
108:								
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
Lizdale--------------	0-7	8.0-20	---	7.4-7.8	5-15	0	0	0
	7-10	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	10-36	6.0-20	---	7.4-9.0	25-60	0	0	0-5
	36-52	5.0-15	---	7.4-9.0	20-45	0	0	0-5
	52-60	5.0-15	---	7.4-9.0	20-45	0	0.0-4.0	0-5

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
109:								
Ridgecrest-----------	0-9	9.0-20	---	7.4-8.4	15-25	0	0	0
	9-13	7.0-15	---	7.4-8.4	20-50	0	0	0
	13-31	7.0-15	---	7.4-8.4	20-50	0	0	0
	31-35	4.0-10	---	7.4-8.4	40-70	0	0.0-2.0	0-5
	35-45	---	---	---	---	---	---	---
Hymas----------------	0-2	10-15	---	6.6-8.4	5-15	0	0	0
	2-7	6.0-15	---	7.4-8.4	10-45	0	0	0
	7-11	5.0-15	---	7.4-9.0	40-50	0	0.0-2.0	0-5
	11-21	---	---	---	---	---	---	---
110:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Buist----------------	0-15	5.0-15	---	7.4-7.8	0-30	0	0.0-2.0	0-5
	15-28	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
	28-60	8.0-20	---	7.9-8.4	15-40	0	0.0-2.0	0-5
111:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
112:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Cedarhill------------	0-7	6.0-15	---	7.4-7.8	10-15	0	0	0
	7-12	6.0-15	---	7.4-8.4	15-35	0	0	0
	12-27	4.0-10	---	7.4-8.4	15-35	0	0	0
	27-60	4.0-10	---	7.9-8.4	15-35	0	0	0
113:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Hondoho--------------	0-14	9.0-20	---	6.6-7.8	0	0	0	0
	14-28	8.0-20	---	7.4-8.4	5-30	0	0	0
	28-60	3.0-20	---	7.4-8.4	15-40	0	0	0
114:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Iphil----------------	0-10	7.0-15	---	7.4-9.0	5-15	0	0.0-2.0	0
	10-36	6.0-15	---	7.4-9.0	15-35	0	0.0-2.0	0-8
	36-60	6.0-15	---	7.4-9.0	10-15	0	0.0-2.0	5-15
Kucera---------------	0-22	8.0-20	---	6.6-8.4	0	0	0	0
	22-42	6.0-15	---	6.6-8.4	0-10	0	0	0
	42-60	5.0-10	---	7.4-9.0	5-15	0	0.0-2.0	0
115:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-60	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
115:								
Iphil----------------	0-10	7.0-15	---	7.4-9.0	5-15	0	0.0-2.0	0
	10-36	6.0-15	---	7.4-9.0	15-35	0	0.0-2.0	0-8
	36-60	6.0-15	---	7.4-9.0	10-15	0	0.0-2.0	5-15
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
116:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Rexburg--------------	0-14	7.0-15	---	6.1-7.8	0	0	0	0
	14-22	8.0-15	---	6.6-7.8	0	0	0	0
	22-60	5.0-10	---	7.4-8.4	15-30	0	0.0-2.0	0
117:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
118:								
Ririe----------------	0-14	10-20	---	6.6-8.4	0	0	0	0
	14-63	7.0-15	---	7.4-9.0	15-35	0	0.0-2.0	5-15
Watercanyon----------	0-5	6.0-15	---	7.4-7.8	5-15	0	0.0-2.0	0-5
	5-33	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
	33-62	3.0-10	---	7.9-9.0	15-35	0	2.0-4.0	2-10
119:								
Samaria--------------	0-5	15-25	---	7.4-8.4	1-5	0	0	0-5
	5-16	15-20	---	7.9-9.0	10-15	0	0	0-13
	16-27	10-15	---	7.9-9.0	20-40	0	0.0-2.0	5-15
	27-64	10-15	---	7.9-9.0	15-25	0	2.0-4.0	5-15
120:								
Samaria--------------	0-5	15-25	---	7.4-8.4	1-5	0	0	0-5
	5-16	15-20	---	7.9-9.0	10-15	0	0	0-13
	16-27	10-15	---	7.9-9.0	20-40	0	0.0-2.0	5-15
	27-64	10-15	---	7.9-9.0	15-25	0	2.0-4.0	5-15
121:								
Samaria--------------	0-5	15-25	---	7.4-8.4	1-5	0	0	0-5
	5-16	15-20	---	7.9-9.0	10-15	0	0	0-13
	16-27	10-15	---	7.9-9.0	20-40	0	0.0-2.0	5-15
	27-64	10-15	---	7.9-9.0	15-25	0	2.0-4.0	5-15
Pollynot-------------	0-7	8.0-25	---	6.6-7.8	0	0	0	0
	7-17	8.0-25	---	6.6-8.4	0-20	0	0.0-2.0	0
	17-41	11-20	---	7.4-8.4	15-25	0	0.0-2.0	0-8
	41-56	10-15	---	7.4-8.4	15-35	0	0.0-2.0	0-8
	56-60	10-15	---	7.4-8.4	15-35	0	0.0-2.0	0-8
122:								
Samaria--------------	0-5	15-25	---	7.4-8.4	1-5	0	0	0-5
	5-16	15-20	---	7.9-9.0	10-15	0	0	0-13
	16-27	10-15	---	7.9-9.0	20-40	0	0.0-2.0	5-15
	27-64	10-15	---	7.9-9.0	15-25	0	2.0-4.0	5-15

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
122:								
Sterling-------------	0-13	8.0-20	---	7.4-8.4	5-15	0	0	0-5
	13-66	6.0-20	---	7.4-8.4	10-40	0	0	0-5
123:								
Sterling-------------	0-13	8.0-20	---	7.4-8.4	5-15	0	0	0-5
	13-66	6.0-20	---	7.4-8.4	10-40	0	0	0-5
124:								
Thatcher-------------	0-7	5.0-15	---	6.6-8.4	0	0	0.0-2.0	0
	7-35	11-21	---	6.6-8.4	0	0	0.0-2.0	0
	35-60	5.0-15	---	7.4-9.0	15-25	0	0.0-2.0	0
125:								
Thatcher-------------	0-7	5.0-15	---	6.6-8.4	0	0	0.0-2.0	0
	7-35	11-21	---	6.6-8.4	0	0	0.0-2.0	0
	35-60	5.0-15	---	7.4-9.0	15-25	0	0.0-2.0	0
Jensen---------------	0-12	10-20	---	6.6-7.8	0	0	0	0
	12-45	9.0-20	---	7.4-8.4	0-10	0	0	0
	45-60	7.0-15	---	7.4-8.4	5-15	0	0	0
126:								
Freedom--------------	0-13	10-20	---	7.4-9.0	5-30	0	0.0-2.0	0-5
	13-34	10-20	---	7.9-9.0	15-40	0	2.0-4.0	5-13
	34-60	5.0-25	---	7.4-9.0	10-30	0	0.0-2.0	5-13
127:								
Tickason-------------	0-10	8.0-14	---	6.6-7.8	0	0	0.0-2.0	0
	10-23	6.0-15	---	7.4-8.4	0-5	0	0.0-2.0	0
	23-31	7.0-13	---	7.4-9.0	15-25	0	0.0-2.0	0-10
	31-38	7.0-13	---	7.4-9.0	15-25	0	0.0-2.0	0
	38-60	7.0-15	---	7.4-9.0	15-25	0	0.0-2.0	0
128:								
Tickason-------------	0-10	8.0-14	---	6.6-7.8	0	0	0.0-2.0	0
	10-23	6.0-15	---	7.4-8.4	0-5	0	0.0-2.0	0
	23-31	7.0-13	---	7.4-9.0	15-25	0	0.0-2.0	0-10
	31-38	7.0-13	---	7.4-9.0	15-25	0	0.0-2.0	0
	38-60	7.0-15	---	7.4-9.0	15-25	0	0.0-2.0	0
129:								
Tirod----------------	0-18	10-25	---	6.6-7.8	0	0	0	0
	18-30	10-30	---	6.6-8.4	0	0	0	0
	30-40	10-30	---	6.6-8.4	0	0	0	0
	40-62	10-15	---	7.9-8.4	15-25	0	0	0
130:								
Toefoot--------------	0-26	11-20	---	6.6-7.8	0	0	0	0
	26-33	9.0-20	---	6.6-8.4	0-15	0	0	0-5
	33-40	7.0-15	---	7.9-8.4	10-20	0	0.0-2.0	0-5
	40-62	5.0-10	---	7.9-8.4	10-20	0	0.0-2.0	0-5
131:								
Welby----------------	0-11	8.0-15	---	7.9-9.0	5-20	0	0.0-2.0	5-15
	11-36	6.0-15	---	7.9-9.0	15-35	0	0.0-2.0	5-20
	36-60	3.0-13	---	7.9-9.0	10-30	0	0.0-2.0	5-20
Parleys--------------	0-5	10-25	---	6.6-7.8	0	0	0.0-2.0	0
	5-26	10-30	---	6.6-8.4	0	0	0.0-2.0	0
	26-64	10-20	---	7.9-9.0	15-40	0	0.0-2.0	0-5

Table 15.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	*meq/100 g*	*meq/100 g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
132:								
Wursten--------------	0-16	7.0-15	---	7.4-8.4	5-15	0	0.0-2.0	0
	16-60	6.0-10	---	7.9-9.0	10-30	0	2.0-4.0	5-12
133:								
Yago-----------------	0-10	20-30	---	6.1-7.3	0	0	0	0
	10-40	20-35	---	6.1-7.3	0-10	0	0	0
	40-60	10-30	---	6.6-7.8	15-25	0	0	0
Manila---------------	0-5	20-35	---	6.1-7.3	0	0	0	0
	5-19	30-60	---	6.1-7.8	0-15	0	0	0
	19-45	30-60	---	6.1-7.8	0-15	0	0	0
	45-60	10-20	---	6.6-8.4	10-25	0	0	0
134:								
Water----------------	---	---	---	---	---	---	---	---

Table 16.--Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. 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)

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
1:										
Araveton	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hades	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
2:										
Arbone--------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
3:										
Arbone--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
4:										
Arbone--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
5:										
Arbone	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Cedarhill	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
6:										
Arbone	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Cedarhill	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
7:										
Bayhook-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
8:										
Bayhook-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ecur----------------------	A	Very low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
9:										
Bingham	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
10:										
Bingham	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Tirod	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
11:										
Bloor	C	Medium								
			January	5.0-6.0	>6.0	---	---	None	---	None
			February	5.0-6.0	>6.0	---	---	None	---	None
			March	5.0-6.0	>6.0	---	---	None	---	None
			April	5.0-6.0	>6.0	---	---	None	---	None
			May	5.0-6.0	>6.0	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Brinnum	D	Very high								
			January	0.5-1.5	>6.0	---	---	None	Long	Occasional
			February	0.5-1.5	>6.0	---	---	None	Long	Occasional
			March	0.5-1.5	>6.0	---	---	None	Long	Occasional
			April	0.5-1.5	>6.0	---	---	None	Long	Occasional
			May	0.5-1.5	>6.0	---	---	None	Long	Occasional
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	0.5-1.5	>6.0	---	---	None	---	None
			October	0.5-1.5	>6.0	---	---	None	Long	Occasional
			November	0.5-1.5	>6.0	---	---	None	Long	Occasional
			December	0.5-1.5	>6.0	---	---	None	Long	Occasional
12:										
Bothwell	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
13:										
Bothwell------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hades---------------------	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Justesen------------------	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
14:										
Brinnum	D	Very high								
			January	0.5-1.5	>6.0	---	---	None	Long	Occasional
			February	0.5-1.5	>6.0	---	---	None	Long	Occasional
			March	0.5-1.5	>6.0	---	---	None	Long	Occasional
			April	0.5-1.5	>6.0	---	---	None	Long	Occasional
			May	0.5-1.5	>6.0	---	---	None	Long	Occasional
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	0.5-1.5	>6.0	---	---	None	---	None
			October	0.5-1.5	>6.0	---	---	None	Long	Occasional
			November	0.5-1.5	>6.0	---	---	None	Long	Occasional
			December	0.5-1.5	>6.0	---	---	None	Long	Occasional
Logan	D	Very high								
			January	---	---	---	---	None	Very brief	Rare
			February	---	---	---	---	None	Very brief	Rare
			March	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			April	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			May	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			June	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			July	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			August	---	---	---	---	None	Very brief	Rare
			September	---	---	---	---	None	Very brief	Rare
			October	---	---	---	---	None	Very brief	Rare
			November	---	---	---	---	None	Very brief	Rare
			December	---	---	---	---	None	Very brief	Rare
Langless	D	Very high								
			January	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			February	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			March	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			April	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			May	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			June	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			November	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			December	1.0-1.5	>6.0	---	---	None	Very long	Frequent

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
15:										
Buckboard-----------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
16:										
Buist---------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
17:										
Calpac--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
17:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ireland	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
18:										
Cedarhill	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
19:										
Cedarhill	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
20:										
Cedarhill	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hymas	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
21:										
Cedarhill	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lostine	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
22:										
Collinston	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table Upper limit	Water table Lower limit	Ponding Surface water depth	Ponding Duration	Ponding Frequency	Flooding Duration	Flooding Frequency
				Ft	Ft	Ft				
23:										
Collinston----------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Kearns--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
24:										
Copenhagen----------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
24:										
Lonigan	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Manila	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
25:										
Darkbull	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
25:										
Pyrat---------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ecur----------------------	A	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
26:										
DeJarnet------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
27:										
Dumps, mine	---	---								
			Jan-Dec	---	---	---	---	None	---	---
28:										
Ecur	A	Very low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
29:										
Ecur	A	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
29:										
Darkbull	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
30:										
Elevator	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	5.0-6.0	5.0-6.0	---	---	None	---	None
			April	5.0-6.0	5.0-6.0	---	---	None	---	None
			May	5.0-6.0	5.0-6.0	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
31:										
Elevator	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	5.0-6.0	5.0-6.0	---	---	None	---	None
			April	5.0-6.0	5.0-6.0	---	---	None	---	None
			May	5.0-6.0	5.0-6.0	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table Upper limit	Water table Lower limit	Ponding Surface water depth	Ponding Duration	Ponding Frequency	Flooding Duration	Flooding Frequency
				Ft	Ft	Ft				
31:										
Jensen	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
32:										
Elevator	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	5.0-6.0	5.0-6.0	---	---	None	---	None
			April	5.0-6.0	5.0-6.0	---	---	None	---	None
			May	5.0-6.0	5.0-6.0	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Jensen	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
33:										
Fridlo	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	3.2-6.0	>6.0	---	---	None	---	None
			May	3.2-6.0	>6.0	---	---	None	---	None
			June	3.2-6.0	>6.0	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
34:										
Goosenawt	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	Very brief	Rare
			April	---	---	---	---	None	Very brief	Rare
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
35:										
Hans	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
36:										
Highcreek-----------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Sterling------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
37:										
Highcreek-----------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
37:										
Sterling------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
38:										
Hillfield-----------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Kucera--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
39:										
Hillfield	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Kucera	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
40:										
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
40:										
Calpac--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lizdale-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
41:										
Hondoho-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
41:										
Hymas	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Pavohroo	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
42:										
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
42:										
Hymas--------------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Pavohroo-----------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
43:										
Hondoho------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
43:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hades	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
44:										
Hutchley	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
44:										
McCarey------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Araveton-----------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
45:										
Hymas--------------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
45:										
Calpac--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ireland-------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
46:										
Hymas---------------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
46:										
Northwater----------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Clayburn------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
47:										
Hymas---------------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
47:										
Povey----------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
48:										
Hymas----------------------	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Povey----------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
48:										
Pavohroo------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
49:										
Inkom---------------------	D	Very high								
			January	---	---	---	---	None	Brief	Frequent
			February	0.0-1.5	>6.0	---	---	None	Brief	Frequent
			March	0.0-1.5	>6.0	---	---	None	Brief	Frequent
			April	0.0-1.5	>6.0	---	---	None	Brief	Frequent
			May	0.0-1.5	>6.0	---	---	None	Brief	Frequent
			June	0.0-1.5	>6.0	---	---	None	Brief	Frequent
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
50:										
Iphil---------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
50:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Watercanyon	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
51:										
Ireland	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
51:										
Calpac	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
52:										
Jensen	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
53:										
Jensen	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
54:										
Jensen	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Iphil	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Wursten	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
55:										
Jovine-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	Very brief	Rare
			April	5.0-6.0	>6.0	---	---	None	Very brief	Rare
			May	5.0-6.0	>6.0	---	---	None	Very brief	Rare
			June	5.0-6.0	>6.0	---	---	None	Very brief	Rare
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
56:										
Justesen-----------------	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
57:										
Justesen-----------------	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
58:										
Justesen	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Buist	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
59:										
Kearns--------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
60:										
Kearns--------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
61:										
Kidman--------------------	B	Very low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
62:										
Kidman	B	Very low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Preston	A	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
63:										
Kucera	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
64:										
Lagonot------------------	C	Low								
			January	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			February	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			March	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			April	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			May	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			June	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			July	---	---	---	---	None	Very brief	Rare
			August	---	---	---	---	None	Very brief	Rare
			September	---	---	---	---	None	Very brief	Rare
			October	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			November	1.5-3.5	>6.0	---	---	None	Very brief	Rare
			December	1.5-3.5	>6.0	---	---	None	Very brief	Rare
65:										
Langless-----------------	D	Very high								
			January	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			February	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			March	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			April	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			May	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			June	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			November	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			December	1.0-1.5	>6.0	---	---	None	Very long	Frequent
66:										
Langless-----------------	D	Very high								
			January	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			February	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			March	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			April	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			May	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			June	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			November	1.0-1.5	>6.0	---	---	None	Very long	Frequent
			December	1.0-1.5	>6.0	---	---	None	Very long	Frequent

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
66:										
Logan--------------------	D	Very high								
			January	---	---	---	---	None	Very brief	Rare
			February	---	---	---	---	None	Very brief	Rare
			March	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			April	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			May	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			June	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			July	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			August	---	---	---	---	None	Very brief	Rare
			September	---	---	---	---	None	Very brief	Rare
			October	---	---	---	---	None	Very brief	Rare
			November	---	---	---	---	None	Very brief	Rare
			December	---	---	---	---	None	Very brief	Rare
67:										
Lanoak-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
68:										
Lanoak-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
69:										
Lanoak	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
70:										
Logan	D	Very high								
			January	---	---	---	---	None	Very brief	Rare
			February	---	---	---	---	None	Very brief	Rare
			March	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			April	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			May	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			June	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			July	0.0-1.5	>6.0	---	---	None	Very brief	Rare
			August	---	---	---	---	None	Very brief	Rare
			September	---	---	---	---	None	Very brief	Rare
			October	---	---	---	---	None	Very brief	Rare
			November	---	---	---	---	None	Very brief	Rare
			December	---	---	---	---	None	Very brief	Rare

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
71:										
Lonigan-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lizdale-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
72:										
Lostine-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
73:										
Manila-------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
74:										
Manila-------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Broadhead----------------	D	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
75:										
Manila	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Broadhead	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
76:										
Manila	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
76:										
Lonigan-------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
77:										
Manila--------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Obnot---------------------	D	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
78:										
Manila---------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Yago-----------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
79:										
Manila---------------------	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
79:										
Yago	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
80:										
Mellor	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Freedom	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
81:										
Neeley--------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
82:										
Northwater----------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Povey---------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
82:										
Pavohroo------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
83:										
Parehat-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	2.0-3.0	>6.0	---	---	None	Long	Occasional
			May	2.0-3.0	>6.0	---	---	None	Long	Occasional
			June	2.0-3.0	>6.0	---	---	None	---	None
			July	2.0-3.0	>6.0	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
84:										
Parleys-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
85:										
Parleys-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
86:										
Parleys-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Welby---------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
87:										
Parleys-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Wheelon-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
88:										
Pavohroo------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
88:										
Povey---------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
89:										
Pavohroo------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Stines--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
89:										
Lonigan	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
90:										
Pits, gravel	D	---								
			Jan-Dec	---	---	---	---	None	---	---
91:										
Povey	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
91:										
Hades	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
92:										
Povey	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
92:										
Ireland-------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Calpac--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
93:										
Povey---------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
93:										
Pavohroo------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
94:										
Povirt--------------------	D	Negligible								
			January	---	---	---	---	None	Very brief	Rare
			February	---	---	---	---	None	Very brief	Rare
			March	---	---	---	---	None	Very brief	Rare
			April	0.0	1.5-1.5	0.0-1.0	Very long	Frequent	Very brief	Rare
			May	0.0	1.5-1.5	0.0-1.0	Very long	Frequent	Very brief	Rare
			June	0.0	1.5-1.5	0.0-1.0	Very long	Frequent	Very brief	Rare
			July	---	---	---	---	None	Very brief	Rare
			August	---	---	---	---	None	Very brief	Rare
			September	---	---	---	---	None	Very brief	Rare
			October	---	---	---	---	None	Very brief	Rare
			November	---	---	---	---	None	Very brief	Rare
			December	---	---	---	---	None	Very brief	Rare
95:										
Raldridge-----------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
96:										
Rexburg-------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
97:										
Rexburg-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Arbone--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
97:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
98:										
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Arbone	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
98:										
Ririe-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
99:										
Rexburg------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Iphil--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
99:										
Watercanyon	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
100:										
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lanoak	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
101:										
Rexburg-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lanoak--------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
102:										
Rexburg-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
102:										
Lanoak	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Watercanyon	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
103:										
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
103:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Kucera	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
104:										
Rexburg	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
104:										
Thatcher	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Ririe	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
105:										
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
105:										
Watercanyon	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Lanoak	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
106:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
106:										
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
107:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
107:										
Hymas	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
108:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
108:										
Lizdale	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
109:										
Ridgecrest	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hymas	D	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
110:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Buist	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
111:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
111:										
Cedarhill	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
112:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Cedarhill	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
113:										
Ririe---------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Hondoho-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
114:										
Ririe---------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
114:										
Iphil	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Kucera	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
115:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
115:										
Iphil	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
116:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
116:										
Rexburg	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
117:										
Ririe	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Watercanyon	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
118:										
Ririe	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Watercanyon	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
119:										
Samaria	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
120:										
Samaria	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
121:										
Samaria	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Pollynot	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
122:										
Samaria-------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Sterling------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
123:										
Sterling------------------	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
124:										
Thatcher------------------	C	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
125:										
Thatcher------------------	C	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
Jensen--------------------	B	High								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
126:										
Freedom------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
127:										
Tickason-----------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
128:										
Tickason-----------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
129:										
Tirod----------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
130:										
Toefoot--------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
131:										
Welby----------------------	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
131:										
Parleys	B	Low								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
132:										
Wursten	B	Medium								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
133:										
Yago	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
133:										
Manila	C	Very high								
			January	---	---	---	---	None	---	None
			February	---	---	---	---	None	---	None
			March	---	---	---	---	None	---	None
			April	---	---	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	---	None
134:										
Water	---	---								
			Jan-Dec	---	---	---	---	None	---	---

Table 17.--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 and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
1:						
Araveton	---	---	---	Moderate	High	Low
Hades	---	---	---	Moderate	Moderate	Moderate
2:						
Arbone	---	---	---	Moderate	High	Low
3:						
Arbone	---	---	---	Moderate	High	Low
4:						
Arbone	---	---	---	Moderate	High	Low
5:						
Arbone	---	---	---	Moderate	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
Cedarhill	---	---	---	Moderate	High	Low
6:						
Arbone	---	---	---	Moderate	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
Cedarhill	---	---	---	Moderate	High	Low
7:						
Bayhook	---	---	---	Low	Moderate	Low
8:						
Bayhook	---	---	---	Low	Moderate	Low
Ecur	---	---	---	Moderate	High	Moderate
9:						
Bingham	---	---	---	Moderate	High	Low
10:						
Bingham	---	---	---	Moderate	High	Low
Tirod	---	---	---	Moderate	High	Low
11:						
Bloor	---	---	---	Moderate	High	High
Brinnum	---	---	---	High	High	Low
12:						
Bothwell	---	---	---	High	Moderate	Low
13:						
Bothwell	---	---	---	High	Moderate	Low
Hades	---	---	---	Moderate	Moderate	Moderate
Justesen	---	---	---	Moderate	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
14:						
Brinnum	---	---	---	High	High	Low
Logan	---	---	---	High	High	Low
Langless	---	---	---	High	High	Moderate
15:						
Buckboard	---	---	---	Moderate	Moderate	Low
16:						
Buist	---	---	---	Moderate	High	Low
17:						
Calpac	---	---	---	Moderate	Moderate	Low
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Ireland	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
18:						
Cedarhill	---	---	---	Moderate	High	Low
19:						
Cedarhill	---	---	---	Moderate	High	Low
20:						
Cedarhill	---	---	---	Moderate	High	Low
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
21:						
Cedarhill	---	---	---	Moderate	High	Low
Lostine	---	---	---	Moderate	Moderate	Low
22:						
Collinston	---	---	---	High	High	Low
23:						
Collinston	---	---	---	High	High	Low
Kearns	---	---	---	High	High	Low
24:						
Copenhagen	Bedrock (lithic)	10-20	Very strongly cemented	Moderate	Moderate	Low
Lonigan	Bedrock (paralithic)	20-40	Moderately cemented	Moderate	High	Low
Manila	---	---	---	Moderate	Moderate	Low
25:						
Darkbull	---	---	---	Moderate	High	Low
Pyrat	---	---	---	Moderate	High	Low
Ecur	---	---	---	Moderate	High	Moderate
26:						
DeJarnet	---	---	---	Moderate	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
27:						
Dumps, mine	---	---	---	---	---	---
28:						
Ecur	---	---	---	Moderate	High	Moderate
29:						
Ecur	---	---	---	Moderate	High	Moderate
Darkbull	---	---	---	Moderate	High	Low
30:						
Elevator	---	---	---	High	High	Low
31:						
Elevator	---	---	---	High	High	Low
Jensen	---	---	---	Moderate	High	Low
32:						
Elevator	---	---	---	High	High	Low
Jensen	---	---	---	Moderate	High	Low
33:						
Fridlo	---	---	---	High	High	High
34:						
Goosenawt	---	---	---	Moderate	Moderate	Low
35:						
Hans	---	---	---	High	High	Low
36:						
Highcreek	---	---	---	Moderate	High	Low
Sterling	---	---	---	Moderate	High	Low
37:						
Highcreek	---	---	---	Moderate	High	Low
Sterling	---	---	---	Moderate	High	Low
38:						
Hillfield	---	---	---	Moderate	High	Low
Kucera	---	---	---	High	High	Low
39:						
Hillfield	---	---	---	Moderate	High	Low
Kucera	---	---	---	High	High	Low
40:						
Hondoho	---	---	---	Moderate	Moderate	Low
Calpac	---	---	---	Moderate	Moderate	Low
Lizdale	---	---	---	Moderate	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
41:						
Hondoho	---	---	---	Moderate	Moderate	Low
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Pavohroo	---	---	---	Moderate	Moderate	Low
42:						
Hondoho	---	---	---	Moderate	Moderate	Low
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Pavohroo	---	---	---	Moderate	Moderate	Low
43:						
Hondoho	---	---	---	Moderate	Moderate	Low
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Hades	---	---	---	Moderate	Moderate	Moderate
44:						
Hutchley	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
McCarey	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Araveton	---	---	---	Moderate	High	Low
45:						
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Calpac	---	---	---	Moderate	Moderate	Low
Ireland	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
46:						
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Northwater	---	---	---	Moderate	Moderate	Low
Clayburn	---	---	---	High	Moderate	Low
47:						
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Povey	---	---	---	Moderate	Moderate	Low
48:						
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
Povey	---	---	---	Moderate	Moderate	Low
Pavohroo	---	---	---	Moderate	Moderate	Low
49:						
Inkom	---	---	---	High	High	Low
50:						
Iphil	---	---	---	High	High	Low
Ririe	---	---	---	High	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
50:						
Watercanyon	---	---	---	High	High	Low
51:						
Ireland	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Calpac	---	---	---	Moderate	Moderate	Low
52:						
Jensen	---	---	---	Moderate	High	Low
53:						
Jensen	---	---	---	Moderate	High	Low
54:						
Jensen	---	---	---	Moderate	High	Low
Iphil	---	---	---	High	High	Low
Wursten	---	---	---	Moderate	High	Low
55:						
Jovine	---	---	---	High	Moderate	Low
56:						
Justesen	---	---	---	Moderate	High	Low
57:						
Justesen	---	---	---	Moderate	High	Low
58:						
Justesen	---	---	---	Moderate	High	Low
Ririe	---	---	---	High	High	Low
Buist	---	---	---	Moderate	High	Low
59:						
Kearns	---	---	---	High	High	Low
60:						
Kearns	---	---	---	High	High	Low
61:						
Kidman	---	---	---	Moderate	High	Moderate
62:						
Kidman	---	---	---	Moderate	High	Moderate
Preston	---	---	---	Low	High	Moderate
63:						
Kucera	---	---	---	High	High	Low
64:						
Lagonot	---	---	---	Moderate	High	Low
65:						
Langless	---	---	---	High	High	Moderate

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
66:						
Langless	---	---	---	High	High	Moderate
Logan	---	---	---	High	High	Low
67:						
Lanoak	---	---	---	High	Moderate	Low
68:						
Lanoak	---	---	---	High	Moderate	Low
69:						
Lanoak	---	---	---	High	Moderate	Low
Hondoho	---	---	---	Moderate	Moderate	Low
70:						
Logan	---	---	---	High	High	Low
71:						
Lonigan	Bedrock (paralithic)	20-40	Moderately cemented	Moderate	High	Low
Lizdale	---	---	---	Moderate	High	Low
72:						
Lostine	---	---	---	Moderate	Moderate	Low
73:						
Manila	---	---	---	Moderate	Moderate	Low
74:						
Manila	---	---	---	Moderate	Moderate	Low
Broadhead	---	---	---	Moderate	Moderate	Low
75:						
Manila	---	---	---	Moderate	Moderate	Low
Broadhead	---	---	---	Moderate	Moderate	Low
76:						
Manila	---	---	---	Moderate	Moderate	Low
Lonigan	Bedrock (paralithic)	20-40	Moderately cemented	Moderate	High	Low
77:						
Manila	---	---	---	Moderate	Moderate	Low
Obnot	---	---	---	Moderate	Moderate	Low
78:						
Manila	---	---	---	Moderate	Moderate	Low
Yago	---	---	---	Moderate	High	Low
79:						
Manila	---	---	---	Moderate	Moderate	Low
Yago	---	---	---	Moderate	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
80:						
Mellor	---	---	---	High	High	High
Freedom	---	---	---	Moderate	High	Moderate
81:						
Neeley	---	---	---	Moderate	High	Low
82:						
Northwater	---	---	---	Moderate	Moderate	Low
Povey	---	---	---	Moderate	Moderate	Low
Pavohroo	---	---	---	Moderate	Moderate	Low
83:						
Parehat	---	---	---	High	High	Low
84:						
Parleys	---	---	---	High	High	Low
85:						
Parleys	---	---	---	High	High	Low
86:						
Parleys	---	---	---	High	High	Low
Welby	---	---	---	Moderate	High	Low
87:						
Parleys	---	---	---	High	High	Low
Wheelon	---	---	---	High	High	Low
88:						
Pavohroo	---	---	---	Moderate	Moderate	Low
Povey	---	---	---	Moderate	Moderate	Low
89:						
Pavohroo	---	---	---	Moderate	Moderate	Low
Stines	---	---	---	Moderate	High	Low
Lonigan	Bedrock (paralithic)	20-40	Moderately cemented	Moderate	High	Low
90:						
Pits, gravel	---	---	---	---	---	---
91:						
Povey	---	---	---	Moderate	Moderate	Low
Hades	---	---	---	Moderate	Moderate	Moderate
Hondoho	---	---	---	Moderate	Moderate	Low
92:						
Povey	---	---	---	Moderate	Moderate	Low
Ireland	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
92:						
Calpac	---	---	---	Moderate	Moderate	Low
93:						
Povey	---	---	---	Moderate	Moderate	Low
Pavohroo	---	---	---	Moderate	Moderate	Low
94:						
Povirt	---	---	---	High	High	Low
95:						
Raldridge	---	---	---	Moderate	High	Low
96:						
Rexburg	---	---	---	High	High	Low
97:						
Rexburg	---	---	---	High	High	Low
Arbone	---	---	---	Moderate	High	Low
Ririe	---	---	---	High	High	Low
98:						
Rexburg	---	---	---	High	High	Low
Arbone	---	---	---	Moderate	High	Low
Ririe	---	---	---	High	High	Low
99:						
Rexburg	---	---	---	High	High	Low
Iphil	---	---	---	High	High	Low
Watercanyon	---	---	---	High	High	Low
100:						
Rexburg	---	---	---	High	High	Low
Lanoak	---	---	---	High	Moderate	Low
101:						
Rexburg	---	---	---	High	High	Low
Lanoak	---	---	---	High	Moderate	Low
102:						
Rexburg	---	---	---	High	High	Low
Lanoak	---	---	---	High	Moderate	Low
Watercanyon	---	---	---	High	High	Low
103:						
Rexburg	---	---	---	High	High	Low
Ririe	---	---	---	High	High	Low
Kucera	---	---	---	High	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
104:						
Rexburg	---	---	---	High	High	Low
Thatcher	---	---	---	High	High	Moderate
Ririe	---	---	---	High	High	Low
105:						
Rexburg	---	---	---	High	High	Low
Watercanyon	---	---	---	High	High	Low
Lanoak	---	---	---	High	Moderate	Low
106:						
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
107:						
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
108:						
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
Lizdale	---	---	---	Moderate	High	Low
109:						
Ridgecrest	Bedrock (lithic)	20-40	Indurated	Moderate	High	Low
Hymas	Bedrock (lithic)	10-20	Indurated	Moderate	High	Low
110:						
Ririe	---	---	---	High	High	Low
Buist	---	---	---	Moderate	High	Low
111:						
Ririe	---	---	---	High	High	Low
Cedarhill	---	---	---	Moderate	High	Low
112:						
Ririe	---	---	---	High	High	Low
Cedarhill	---	---	---	Moderate	High	Low
113:						
Ririe	---	---	---	High	High	Low
Hondoho	---	---	---	Moderate	Moderate	Low
114:						
Ririe	---	---	---	High	High	Low
Iphil	---	---	---	High	High	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
114:						
Kucera	---	---	---	High	High	Low
115:						
Ririe	---	---	---	High	High	Low
Iphil	---	---	---	High	High	Low
Rexburg	---	---	---	High	High	Low
116:						
Ririe	---	---	---	High	High	Low
Rexburg	---	---	---	High	High	Low
117:						
Ririe	---	---	---	High	High	Low
Watercanyon	---	---	---	High	High	Low
118:						
Ririe	---	---	---	High	High	Low
Watercanyon	---	---	---	High	High	Low
119:						
Samaria	---	---	---	Moderate	High	Low
120:						
Samaria	---	---	---	Moderate	High	Low
121:						
Samaria	---	---	---	Moderate	High	Low
Pollynot	---	---	---	Moderate	Moderate	Low
122:						
Samaria	---	---	---	Moderate	High	Low
Sterling	---	---	---	Moderate	High	Low
123:						
Sterling	---	---	---	Moderate	High	Low
124:						
Thatcher	---	---	---	High	High	Moderate
125:						
Thatcher	---	---	---	High	High	Moderate
Jensen	---	---	---	Moderate	High	Low
126:						
Freedom	---	---	---	Moderate	High	Moderate
127:						
Tickason	---	---	---	Moderate	Moderate	Low
128:						
Tickason	---	---	---	Moderate	Moderate	Low

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
129:						
Tirod	---	---	---	Moderate	High	Low
130:						
Toefoot	---	---	---	Moderate	Moderate	Low
131:						
Welby	---	---	---	Moderate	High	Low
Parleys	---	---	---	High	High	Low
132:						
Wursten	---	---	---	Moderate	High	Low
133:						
Yago	---	---	---	Moderate	High	Low
Manila	---	---	---	Moderate	Moderate	Low
134:						
Water	---	---	---	---	---	---

Table 18.--Taxonomic Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series)

Soil name	Family or higher taxonomic class
Araveton	Fine-loamy, mixed, frigid Calcic Haploxerolls
Arbone	Coarse-loamy, mixed, frigid Calcic Haploxerolls
Bayhook	Coarse-silty, mixed, mesic Sodic Xeric Haplocalcids
*Bingham	Fine-loamy, mixed, mesic Calcic Pachic Argixerolls
Bloor	Fine-silty, mixed, mesic Durinodic Xeric Natrargids
Bothwell	Fine-silty, mixed, frigid Pachic Argixerolls
*Brinnum	Fine-silty, mixed (calcareous), mesic Aeric Endoaquents
Broadhead	Fine, montmorillonitic, frigid Pachic Argixerolls
Buckboard	Fine-loamy, mixed, frigid Pachic Haploxerolls
Buist	Loamy-skeletal, mixed, frigid Calcic Haploxerolls
Calpac	Loamy-skeletal, mixed, frigid Calcic Pachic Haploxerolls
Cedarhill	Loamy-skeletal, mixed, frigid Typic Calcixerolls
Clayburn	Fine-loamy, mixed Argic Pachic Cryoborolls
Collinston	Fine-silty, mixed, mesic Typic Calcixerolls
Copenhagen	Ashy-skeletal, frigid Lithic Haploxerolls
Darkbull	Loamy-skeletal, mixed, mesic Sodic Xeric Haplocalcids
DeJarnet	Loamy-skeletal, mixed, mesic Calcic Pachic Haploxerolls
Ecur	Coarse-loamy, mixed, mesic Sodic Xeric Haplocalcids
Elevator	Fine-silty, mixed, frigid Calcic Argixerolls
Freedom	Fine-silty, mixed, mesic Xeric Haplocalcids
Fridlo	Fine-silty, mixed, mesic Typic Natrixerolls
Goosenawt	Fine-loamy, mixed, mesic Cumulic Haploxerolls
Hades	Fine-loamy, mixed, frigid Pachic Argixerolls
Hans	Fine-silty, mixed, mesic Calcixerollic Xerochrepts
Highcreek	Fine-loamy, mixed, mesic Calcic Haploxerolls
Hillfield	Coarse-silty, mixed, mesic Calcixerollic Xerochrepts
Hondoho	Loamy-skeletal, mixed, frigid Calcic Haploxerolls
Hutchley	Loamy-skeletal, mixed, frigid Lithic Argixerolls
*Hymas	Loamy-skeletal, carbonatic, frigid Lithic Calcixerolls
Inkom	Fine-silty, mixed (calcareous), frigid Cumulic Endoaquolls
Iphil	Coarse-silty, mixed, frigid Typic Calcixerolls
Ireland	Loamy-skeletal, mixed, frigid Calcic Haploxerolls
Jensen	Fine-loamy, mixed, frigid Calcic Pachic Argixerolls
Jovine	Coarse-silty, mixed, frigid Cumulic Haploxerolls
Justesen	Fine-loamy, mixed, frigid Calcic Argixerolls
Kearns	Fine-silty, mixed, mesic Calcic Haploxerolls
Kidman	Coarse-loamy, mixed, mesic Calcic Haploxerolls
Kucera	Coarse-silty, mixed, frigid Calcic Pachic Haploxerolls
Lagonot	Fine-silty, mixed, mesic Aquic Calcixerolls
Langless	Coarse-silty, mesic Typic Calciaquolls
Lanoak	Fine-silty, mixed, frigid Pachic Haploxerolls
Lizdale	Loamy-skeletal, carbonatic, frigid Typic Calcixerolls
Logan	Fine-silty, mesic Typic Calciaquolls
Lonigan	Ashy-skeletal, frigid Vitrandic Haploxerolls
Lostine	Coarse-silty, mixed, frigid Pachic Haploxerolls
Manila	Fine, montmorillonitic, frigid Typic Argixerolls
McCarey	Fine-loamy, mixed, frigid Calcic Argixerolls
Mellor	Fine-silty, mixed, mesic Xeric Natrargids
Neeley	Coarse-silty, mixed, mesic Calcidic Haploxerolls
Northwater	Loamy-skeletal, mixed Cryic Pachic Paleborolls
Obnot	Fine, montmorillonitic, frigid Typic Haploxererts
Parehat	Fine-silty, mixed, mesic Fluvaquentic Haploxerolls
Parleys	Fine-silty, mixed, mesic Calcic Argixerolls
Pavohroo	Fine-loamy, mixed Pachic Cryoborolls
Pollynot	Fine-loamy, mixed, mesic Calcic Argixerolls
Povey	Loamy-skeletal, mixed Pachic Cryoborolls
Povirt	Fine, montmorillonitic (calcareous), frigid Vertic Epiaquepts
Preston	Mixed, mesic Typic Xeropsamments
Pyrat	Loamy-skeletal, mixed, mesic Durinodic Xeric Haplocalcids
Raldridge	Fine-loamy, mixed, mesic Calcic Pachic Argixerolls

Table 18.--Taxonomic Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Rexburg	Coarse-silty, mixed, frigid Calcic Haploxerolls
*Ridgecrest	Loamy-skeletal, carbonatic, frigid Typic Calcixerolls
Ririe	Coarse-silty, mixed, frigid Calcic Haploxerolls
Samaria	Fine-loamy, mixed, mesic Typic Calcixerolls
Sterling	Loamy-skeletal, mixed, mesic Typic Calcixerolls
Stines	Ashy-skeletal, frigid Vitrandic Haploxerolls
Thatcher	Fine-silty, mixed, frigid Calcic Argixerolls
Tickason	Coarse-loamy, mixed, mesic Calcidic Haploxerolls
Tirod	Fine-loamy, mixed, mesic Calcic Argixerolls
Toefoot	Coarse-loamy, mixed, frigid Cumulic Haploxerolls
Watercanyon	Coarse-silty, mixed, frigid Calcixerollic Xerochrepts
Welby	Coarse-silty, mixed, mesic Typic Calcixerolls
Wheelon	Fine-silty, mixed, mesic Calcixerollic Xerochrepts
Wursten	Coarse-loamy, mixed, frigid Typic Calcixerolls
Yago	Clayey-skeletal, montmorillonitic, frigid Typic Argixerolls

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