United States
Department of
Agriculture

Natural Resources
Conservation
Service

In cooperation with the
Arkansas Agricultural
Experiment Station

Soil Survey of Nevada County, Arkansas

How To Use This Soil Survey

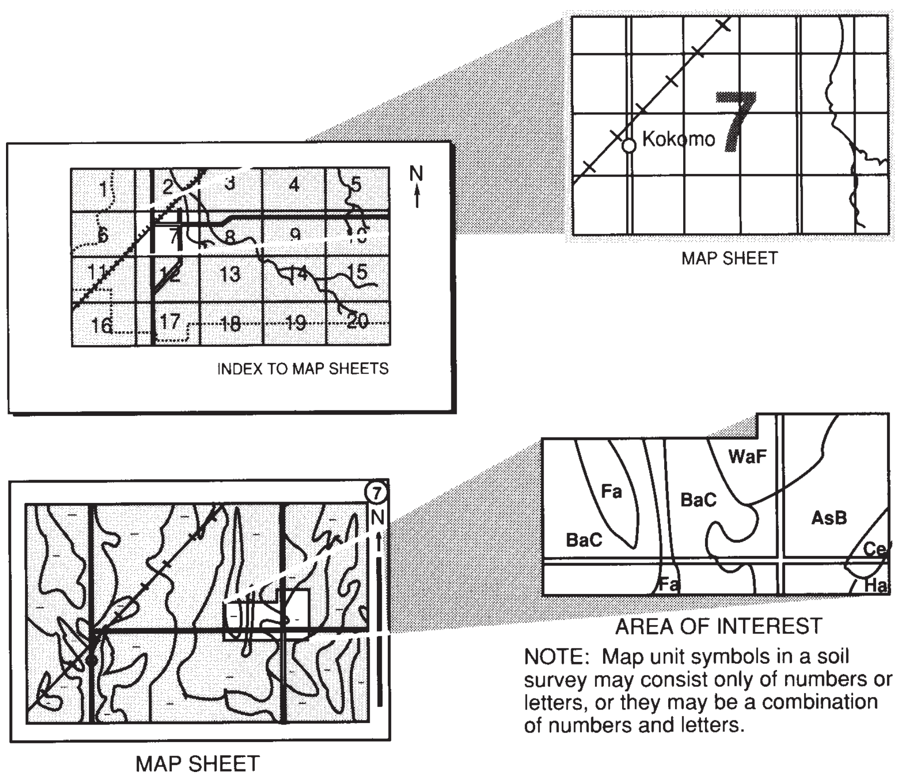
Detailed Soil Maps

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

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

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Go to **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described. The map unit symbols and names also appear as bookmarks, which link directly to the appropriate page in the publication.

The **Contents** and bookmarks also show 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.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

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. This survey was made cooperatively by the Natural Resources Conservation Service and the Arkansas Agricultural Experiment Station. It is part of the technical assistance furnished to the Nevada County Conervation District.

Major fieldwork for this soil survey was completed in 1999. Soil names and descriptions were approved in 2000. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1999. The most current official data are available through the NRCS Soil Data Mart Website at http://soildatamart.nrcs.usda.gov.

Cover: Pasture in an area of Wilcox silty clay loam, 1 to 8 percent slopes.

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

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. Soil surveys highlight soil limitations, improvements needed to overcome those limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, ranchers, foresters, and agronomists can use the surveys 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 surveys 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 surveys 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 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. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. 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.

Kalven Trice
State Conservationist
Natural Resources Conservation Service

Where To Get Updated Information

The soil properties and interpretations included in this survey were current as of 1999. The most current information is available through the Natural Resources Conservation Service Soil Data Mart Website at http://soildatamart.nrcs.usda.gov/ and/or the Natural Resources Conservation Service Web Soil Survey at http://websoilsurvey.nrcs.usda.gov/app.

Additional information is available from the Natural Resources Conservation Service Field Office Technical Guide at Hope, Arkansas, or online at www.nrcs.usda.gov/technical/efotg. The data in the Field Office Technical Guide are updated periodically.

Additional information about soils and about NRCS is available through the Arkansas NRCS Web page at www.ar.nrcs.usda.gov.

For further information please contact:

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Soil Survey of
Nevada County, Arkansas

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with
the Arkansas Agricultural Experiment Station

Introduction

Nevada County is in the southwestern part of Arkansas. (fig. 1) It is the forty-sixth largest county in the state. Total area of the county is about 397, 216 acres or about 629 square miles. It is roughly 32 miles east to west and about 47 miles north to south.

Nevada County is bounded on the south by Columbia and Lafayette counties, on the west by Hempstead and Lafayette counties, the east by Ouachita County and on the north by Pike and Clark Counties divided by the Little Missouri River.

Figure 1. Location of Nevada County in Arkansas.

General Natural of the County

In this section, the physical and environmental factors that affect Nevada County are discussed. These factors include farming, physiography, drainage, and climate.

Farming

Nevada County was formed in 1871 from parts of Hempstead and Columbia Counties. Early settlers in Nevada County were mostly subsistence farmers. They cleared and farmed small scattered areas of gently sloping upland. A few farmed the better drained flood plains along the Little Missouri and major streams. The Cretaceous Western Coastal Plain locally known as the “Blackland Prairie” was originally in prairie grasses. These areas were converted to farms very early. As roads were built; markets were developed, and more flood plains and uplands were cleared. Cotton, corn, small grains, and livestock were produced for cash sale.

In 1992, only about 18 percent of Nevada County was in farms. Between 1982 and 1992, the number of farms decreased from 501 to 387. During the same time, the average acreage size increased from 166 to 179. The rest of the county consists of pasture, extensive wooded tracts, cities, towns, transportation, utility facilities, homes, industrial developments, oil fields, and state land within the White Oak Game Management Areas and Poison Spring State Forest.

With the decline of row crop farming, the majority of the county has gone back to timber. It is now about 82 percent woodland, with loblolly and shortleaf species as the principal species on the upland and terraces, and hardwood species such as oak, gum, and hickory on the floodplains. Today, the timber and oil industries are the most important part of the Nevada County economy. Most of the acreage is managed for the production of pulpwood, poles, and saw logs. The remaining land is used for pasture and forage crops. A few acres are used for watermelon, fruit orchards, winter grains, corn, rice, soybeans, and peas. (fig. 2) Livestock and poultry production are also economically important.

Figure 2. Peas planted on Darden soil.

Physiography

The geologic deposits at the surface in Nevada County are unconsolidated sediments laid down by water and range from chalk to marl. Topographically, Nevada County can be divided into three main areas, the level to nearly level flood plains and terraces along the Little Missouri River and Terre Rouge Creek; nearly level to gently sloping Cretaceous Western Coastal Plain locally known as the “Blackland Prairie”; and nearly level to steep tertiary aged Western Coastal Plain.

The topography of the floodplains and terraces are mostly broad flats. The major soil series on the floodplains are; Bibb, Guyton, Ouachita, and Sardis, while Amy and Smithton soils reside on terraces. The major soils of the Cretaceous Western Coastal Plain include; DeAnn, Japany, and Laneburg, with Una and Urbo on the floodplains areas. The nearly level to steeply sloping Western Coastal Plain has the Angie, Bowie, Briley, Darden, Harleston, Pikeville, Rosalie, Ruston, Sacul, Saffell, Savannah, Sawyer, Smithdale, Warnock, and Wilcox soil series. The Prescott soils are located on nearly level ancient stream terraces. (fig. 3)

Drainage

Drainage in Nevada County flows mainly west to northeast in the northern and central parts of the county, and north to south in the southern and eastern parts. Middle Creek, Howard Creek, Black Creek, Garland Creek, Cox Creek, Terre Rouge Creek, and their tributaries carry most of the water in the northern and central parts of the county. Caney Creek, Mill Creek, Bayou Dorcheat, Little Allen Branch, Clear Creek, Little Smackover Creek, Gum Creek and their tributaries carry most of the water in the southern and eastern parts of the county. Other major waterways and their tributaries include: Brush Creek, Bee Branch, Onion Creek, Steel Creek, Sandy Creek, Witten Branch, Cypress Creek, and Sanders Creek.

Figure 3. Prescott soil located on ancient stream terrace.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Prescott, Arkansas, in the period 1930 to 1998. 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 46 degrees F and the average daily minimum temperature is 37 degrees. In summer, the average temperature is 80 degrees F and the average daily maximum temperature is 91 degrees.

The average annual precipitation is about 54 inches. Of this total, 26 inches, or about 48 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 10 inches. Thunderstorms occur on about 57 days each year, and most occur in summer. Average seasonal snowfall is about 4 inches. On average, 1 day a year has at least 1 inch of snow on the ground, but the number of such days varies greatly from year to year.

Nevada County has long, hot summers and rather cool winters. An occasional cold wave brings near-freezing or sub-freezing temperatures but seldom much snow. Precipitation is fairly heavy throughout the year, and prolonged droughts are rare. Summer precipitation falls mainly as afternoon thunderstorms and is adequate for all crops. Severe local storms, including tornadoes, strike in or near the area occasionally. The storms are of short duration, and the damage they cause is variable and spotty.

Freeze dates in table 2 are used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall. Growing degree days are shown in table 3. 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).

How This Survey Was Made

This survey was made to provide information about the soils in the survey area. The information includes a description of the soils and their location and a discussion of the suitability, limitations, and management of the soils for specified uses. Soil scientists observed the steepness, length, and shape of slopes; the general pattern of drainage; the kinds of crops and native plants growing on the soils; 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 from 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 in the survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil is associated with a particular kind of landscape or with a segment of the landscape. By observing the soils in the survey area and relating their position to specific segments of the landscape, a soil scientist develops a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil 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-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 (Soil Survey Staff, 1999), 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 are generally 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 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 assure 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.

Detailed Soil Map Unit Descriptions

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

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

The presence of minor components in a map unit does not diminish 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. Soils that have profiles which 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, Smithdale fine sandy loam, 3 to 8 percent slopes, is one of several phases in the Smithdale series.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Oil-waste land is one such example. Miscellaneous areas are shown on the soil maps. 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. The “Use and Management of Soils” section describes potentials and limitations of the soils for specific land uses.

AdB—Adaton silt loam, 0 to 2 percent slopes

Map Unit Composition

Major Components:
Adaton and similar soils: 90 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Upland flats and depression
Landform position: Concave convex areas
Parent material: Silty marine deposits
Slope: 0 to 2 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: Very high (About 0.20 in/ in)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 0.5 ft, apparent
Runoff class: Low
Non-irrigated land capability: 3w

Typical Profile

Surface layer:
0 to 7 inches; light brownish gray silt loam with brown masses of oxidized iron; strongly acid
Subsoil layer:
7 to 20 inches; gray silt loam with reddish yellow and yellowish brown masses of oxidized iron; very strongly acid
Subsoil layer:
20 to 35 inches; gray silty clay loam with reddish yellow and yellowish brown masses of oxidized iron; very strongly acid

35 to 50 inches; gray silty clay loam; very strongly acid
50 to 60 inches; gray silty clay; very strongly acid
Substratum layer:
60 to 80 inches; light brownish gray clay; very strongly acid

AmB—Amy silt loam, 0 to 2 percent slopes

Map Unit Composition

Major Components:
Amy and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Nearly level stream terrace
Landform position: Concave linear areas
Parent material: Silty alluvium
Slope: 0 to 2 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Low (About 1.40 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: Low
Non-irrigated land capability: 3w

Typical Profile

Surface layer:
0 to 3 inches; grayish brown silt loam; strongly acid
Subsurface layer:
3 to 11 inches; light brownish gray silt loam; very strongly acid
Subsoil layer:
11 to 40 inches; gray silt loam with yellowish brown and brownish yellow masses of oxidized iron; very strongly acid
40 to 62 inches; gray silty clay loam with yellowish brown and red masses of oxidized iron; very strongly acid
62 to 72 inches; light brownish gray silty clay loam with strong brown masses of oxidized iron; very strongly acid
Substratum layer:
72 to 80 inches; light brownish gray silty clay loam with red masses of oxidized iron; extremely acid

AnC—Angie fine sandy loam, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Angie and similar soils: 90 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Clayey marine deposits
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 3 to 5 ft, apparent
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 7 inches; brown fine sandy loam; strongly acid
Subsurface layer:
7 to 14 inches; yellowish brown fine sandy loam; strongly acid
Subsoil layer:
14 to 19 inches; yellowish brown silty clay loam with brownish yellow masses of oxidized iron; strongly acid
19 to 26 inches; yellowish brown silty clay loam with brownish yellow and yellowish brown masses of oxidized iron; strongly acid
26 to 35 inches; brownish yellow silty clay loam with yellowish red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
35 to 55 inches; gray silty clay with red and brownish yellow masses of oxidized iron; very strongly acid
55 to 65 inches; gray silty clay with brownish yellow masses of oxidized iron; very strongly acid
Substratum layer:
65 to 80 inches; light brownish gray silty clay with yellowish brown masses of oxidized iron; extremely acid

BbA—Bibb fine sandy loam, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Major Components:
Bibb and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas

Parent material: Stratified loamy and sandy alluvium
Slope: 0 to 1 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.16 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: Very low
Non-irrigated land capability: 5w

Typical Profile:

Surface layer:
0 to 3 inches; brown fine sandy loam; very strongly acid
3 to 13 inches; grayish brown sandy loam with dark yellowish brown masses of oxidized iron; very strongly acid
Substratum layer:
13 to 40 inches; gray sandy loam with brownish yellow and yellowish brown masses of oxidized iron; very strongly acid
Substratum layer:
40 to 60 inches; light brownish gray sandy loam with brownish yellow masses of oxidized iron; very strongly acid
60 to 80 inches; light brownish gray very fine sandy loam with brownish yellow masses of oxidized iron; very strongly acid

BoB—Bowie fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Bowie and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex linear areas
Parent material: Loamy marine deposits
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: Moderate (About 0.12 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 3.5 to 5 ft, perched
Runoff class: Medium
Non-irrigated land capability: 2e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsurface layer:
5 to 10 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
10 to 21 inches; yellowish brown sandy clay loam; very strongly acid
21 to 40 inches; strong brown sandy clay loam; very strongly acid
40 to 50 inches; yellowish brown loam with red masses of oxidized iron; light gray iron depletions; very strongly acid
50 to 80 inches; red clay loam with yellowish brown masses of oxidized iron; light gray iron depletions; very strongly acid

BoC—Bowie fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Bowie and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex Convex areas
Parent material: Loamy marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: Moderate (About 0.12 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 3.5 to 5 ft, perched
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsurface layer:
5 to 10 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
10 to 21 inches; yellowish brown sandy clay loam; very strongly acid
21 to 40 inches; strong brown sandy clay loam; very strongly acid
40 to 50 inches; yellowish brown loam with red masses of oxidized iron; light gray iron depletions; very strongly acid
50 to 80 inches; red clay loam with yellowish brown masses of oxidized iron; light gray iron depletions; very strongly acid

BrC—Briley loamy fine sand, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Briley and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Sandy and loamy marine deposits
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: High (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.10 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Very low
Non-irrigated land capability: 3s

Typical Profile

Surface layer:
0 to 4 inches; brown loamy fine sand; slightly acid
Subsurface layer:
4 to 12 inches; brown loamy fine sand; strongly acid
12 to 21 inches; light yellowish brown loamy fine sand; strongly acid
Subsoil layer:
21 to 35 inches; red sandy clay loam; strongly acid
35 to 80 inches; red sandy clay loam with yellowish brown masses of oxidized iron; very strongly acid

DaC—Darden loamy fine sand, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Darden and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Sandy marine deposits
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None

Drainage class: Excessively drained
Slowest saturated hydraulic conductivity: Very high (About 42.00 micrometers/sec)
Available water capacity: Low (About 0.08 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Very low
Non-irrigated land capability: 4s

Typical Profile

Surface layer:
 0 to 6 inches; brown loamy fine sand; moderately acid
Subsoil layer:
 6 to 17 inches; brown loamy fine sand; strongly acid
 17 to 47 inches; strong brown loamy fine sand; strongly acid
 47 to 80 inches; strong brown loamy sand; very strongly acid

DaD—Darden loamy fine sand, 8 to 15 percent slopes

Map Unit Composition

Major Components:
Darden and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear backslope
Parent material: Sandy marine deposits
Slope: 8 to 15 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Excessively drained
Slowest saturated hydraulic conductivity: Very high (About 42.00 micrometers/sec)
Available water capacity: Low (About 0.08 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Low
Non-irrigated land capability: 6s

Typical Profile

Surface layer:
 0 to 6 inches; brown loamy fine sand; moderately acid
Subsoil layer:
 6 to 17 inches; brown loamy fine sand; strongly acid
 17 to 47 inches; strong brown loamy fine sand; strongly acid
 47 to 80 inches; strong brown loamy sand; very strongly acid

DaE—Darden loamy fine sand, 15 to 35 percent slopes

Map Unit Composition

Major Components:
Darden and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Linear convex backslope
Parent material: Sandy marine deposits
Slope: 15 to 35 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Excessively drained
Slowest saturated hydraulic conductivity: Very high (About 42.00 micrometers/sec)
Available water capacity: Low (About 0.08 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Medium
Non-irrigated land capability: 6s

Typical Profile

Surface layer:
0 to 6 inches; brown loamy fine sand; moderately acid
Subsoil layer:
6 to 17 inches; brown loamy fine sand; strongly acid
17 to 47 inches; strong brown loamy fine sand; strongly acid
47 to 80 inches; strong brown loamy sand; very strongly acid

DeC—DeAnn clay, 3 to 8 percent slopes

Map Unit Composition

Major Components:
DeAnn and similar soils: 92 percent

Component Descriptions

MLRA: 135B—Cretaceous Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear footslope
Parent material: Alkaline clayey marine deposits derived from chalk
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: Between 4 and 6 ft
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)

Shrink-swell potential: Very high (About 17.0 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 4 to 6 ft, apparent
Runoff class: High
Non-irrigated land capability: 4e

Typical Profile

Surface layer:
0 to 6 inches; very dark gray clay; slightly acid
6 to 20 inches; very dark grayish brown clay with light olive brown masses of oxidized iron; slightly acid
Subsoil layer:
20 to 40 inches; light olive brown clay; light gray iron depletions; neutral
Subsoil layer:
40 to 80 inches; light olive brown clay; light gray iron depletions; moderately alkaline

GyB—Guyton silt loam, 0 to 2 percent slopes, frequently flooded

Map Unit Composition

Major Components:
Guyton and similar soils: 90 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas
Parent material: Loamy alluvium
Slope: 0 to 2 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderate (About 1.42 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: Very low
Non-irrigated land Capability: 5w

Typical Profile

Surface layer:
0 to 3 inches; brown silt loam; strongly acid
Subsurface layer:
3 to 14 inches; gray silt loam with dark yellowish brown masses of oxidized iron; very strongly acid

Subsoil layer:

14 to 28 inches; gray silt loam with dark yellowish brown masses of oxidized iron; very strongly acid

28 to 36 inches; gray silt loam with yellowish brown masses of oxidized iron; light gray clay depletions; very strongly acid

36 to 63 inches; gray silt loam with yellowish brown masses of oxidized iron; gray clay depletions; very strongly acid

Substratum layer:

63 to 80 inches; gray silty clay loam with yellowish brown and strong brown masses of oxidized iron; very strongly acid

HaC—Harleston fine sandy loam, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Harleston and similar soils: 85 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Sandy alluvium
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.13 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2 to 3 ft, apparent
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:

0 to 7 inches; dark grayish brown fine sandy loam; strongly acid

Subsurface layer:

7 to 13 inches; brown fine sandy loam; very strongly acid

Subsoil layer:

13 to 28 inches; yellowish brown sandy loam; very strongly acid

28 to 43 inches; yellowish brown loam with strong brown masses of oxidized iron; gray iron depletions; very strongly acid

43 to 62 inches; strong brown loam with yellowish brown masses of oxidized iron; light brownish gray iron depletions; very strongly acid

62 to 80 inches; 50 percent gray, 30 percent red, 10 percent yellowish brown, and 10 percent strong brown stratified sandy clay loam; very strongly acid

JaC—Japany silt loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Japany and similar soils: 95 percent

Component Descriptions

MLRA: 135B—Cretaceous Western Coastal Plain
Landform: Blackland Prairie interfluve
Landform position: Convex linear areas
Parent material: Cretaceous clayey marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: Very high (Greater than 0.22 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 1 to 1.5 ft, perched
Runoff class: High
Non-irrigated land capability: 4e

Typical Profile

Surface layer:
0 to 3 inches; dark grayish brown silt loam; moderately acid
Subsurface layer:
3 to 10 inches; brown silt loam; strongly acid
Subsoil layer:
10 to 19 inches; yellowish brown silty clay loam; light brownish gray iron depletions; very strongly acid
19 to 25 inches; yellowish brown silty clay loam with red masses of oxidized iron; pale red iron depletions; very strongly acid
25 to 43 inches; yellowish brown silty clay with red and brownish yellow masses of oxidized iron; very strongly acid
43 to 55 inches; gray silty clay with red and brownish yellow masses of oxidized iron; light gray clay depletions; very strongly acid
Substratum layer:
55 to 80 inches; light brownish gray clay with brownish yellow masses of oxidized iron; very strongly acid

LaB—Laneburg silty clay loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Laneburg and similar soils: 85 percent

Component Descriptions

MLRA: 135B—Cretaceous Western Coastal Plain
Landform: Blackland Prairie interfluve

Landform position: Convex linear areas
Parent material: Acid clayey marine deposits over calcareous clayey marine deposits derived from chalk
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: Very high (About 17.0 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: High
Non-irrigated land capability: 3w

Typical Profile

Surface layer:
0 to 7 inches; brown silty clay loam; strongly acid
Subsoil layer:
7 to 16 inches; grayish brown silty clay loam with dark brown masses of oxidized iron; very strongly acid
16 to 23 inches; light brownish gray silty clay loam with brownish yellow and dark brown masses of oxidized iron; very strongly acid
23 to 31 inches; gray silty clay with dark brown and brownish yellow masses of oxidized iron; very strongly acid
31 to 44 inches; light brownish gray clay with strong brown and brownish yellow masses of oxidized iron; strongly acid
Substratum layer:
44 to 60 inches; gray clay with strong brown and brownish yellow masses of oxidized iron; moderately acid
60 to 80 inches; gray clay with olive yellow and brownish yellow masses of oxidized iron; neutral

OuA—Ouachita silt loam, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Major Components:
Ouachita and similar soils: 85 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas
Parent material: Loamy alluvium
Slope: 0 to 1 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)

Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Very low
Non-irrigated land capability: 5w

Typical Profile

Surface layer:
0 to 4 inches; dark grayish brown silt loam; strongly acid
Subsoil layer:
4 to 16 inches; yellowish brown silt loam; very strongly acid
16 to 27 inches; yellowish brown silt loam with pale brown masses of oxidized iron; very strongly acid
27 to 42 inches; dark yellowish brown silt loam with pale brown masses of oxidized iron; very strongly acid
Substratum layer:
42 to 80 inches; dark yellowish brown very fine sandy loam with yellowish brown masses of oxidized iron; light brownish gray iron depletions; very strongly acid

PkC—Pikeville fine sandy loam, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Pikeville and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Gravelly loamy marine deposits
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: Low (About 0.10 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Low
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsoil layer:
5 to 11 inches; yellowish red loam; very strongly acid
11 to 25 inches; red sandy clay loam; very strongly acid

25 to 32 inches; red gravelly sandy clay loam; very strongly acid
32 to 38 inches; red extremely gravelly sandy clay loam with dark reddish brown and yellowish brown masses of oxidized iron; very strongly acid

Subsoil layer:
38 to 80 inches; red extremely gravelly sandy clay loam with dark reddish brown and yellowish brown masses of oxidized iron; very strongly acid

PtC—Prescott silt loam, 1 to 6 percent slopes

Map Unit Composition

Major Components:
Prescott and similar soils: 85 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Loamy marine deposits
Slope: 1 to 6 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: Very high (Greater than 0.22 in/in)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 1.5 to 2.5 ft, perched
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 6 inches; dark grayish brown silt loam with black and brown iron-manganese concretions; strongly acid

Subsoil layer:
6 to 15 inches; strong brown silt loam with brown masses of oxidized iron; strongly acid
15 to 21 inches; yellowish brown silt loam with brown masses of oxidized iron; very strongly acid
21 to 35 inches; yellowish brown silt loam with strong brown masses of oxidized iron; grayish brown clay depletions; very strongly acid
35 to 65 inches; light gray silt loam with yellowish brown masses of oxidized iron; very strongly acid
65 to 80 inches; light brownish gray gravelly silty clay with yellowish brown and strong brown masses of oxidized iron; grayish brown clay depletions; extremely acid

RsC—Rosalie loamy fine sand, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Rosalie and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Sandy marine deposits
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Very low
Non-irrigated land capability: 3s

Typical Profile:

Surface layer:
0 to 8 inches; brown loamy fine sand; strongly acid
Subsurface layer:
8 to 23 inches; light yellowish brown loamy fine sand; very strongly acid
Subsurface layer:
23 to 36 inches; very pale brown loamy fine sand with yellowish brown masses of oxidized iron; very strongly acid
Subsoil layer:
36 to 48 inches; 85 percent yellowish brown and 15 percent very pale brown sandy clay loam with red masses of oxidized iron; very strongly acid
48 to 68 inches; yellowish brown sandy clay loam with red masses of oxidized iron; light gray clay depletions; very strongly acid
68 to 80 inches; 40 percent light gray, 40 percent red, and 20 percent brownish yellow sandy clay loam; very strongly acid

RuB—Ruston fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Ruston and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve
Landform position: Linear convex areas

Parent material: Loamy marine deposits
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Low
Non-irrigated land capability: 2e

Typical Profile

Surface layer:
0 to 8 inches; brown fine sandy loam; moderately acid
Subsoil layer:
8 to 13 inches; red fine sandy loam; moderately acid
13 to 20 inches; reddish brown sandy clay loam; strongly acid
20 to 42 inches; red sandy clay loam; strongly acid
42 to 66 inches; 80 percent reddish brown and 20 percent yellowish brown fine sandy loam; very strongly acid
66 to 80 inches; red loam; very strongly acid

SaB—Sacul fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Sacul and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex linear areas
Parent material: Clayey marine deposits
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2 to 4 ft, apparent
Runoff class: Low
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 3 inches; brown fine sandy loam; strongly acid

Subsurface layer:
3 to 7 inches; brown fine sandy loam; very strongly acid
Subsoil layer:
7 to 15 inches; red clay; very strongly acid
15 to 24 inches; red clay with red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
24 to 57 inches; light brownish gray silty clay loam with red masses of oxidized iron; very strongly acid
57 to 67 inches; light brownish gray clay loam with red masses of oxidized iron; very strongly acid
67 to 73 inches; light brownish gray silty clay loam with yellowish red masses of oxidized iron; very strongly acid
Substratum layer:
73 to 80 inches; light brownish gray silt loam with strong brown masses of oxidized iron; very strongly acid

SaC—Sacul fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Sacul and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex linear areas
Parent material: Clayey marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2 to 4 ft, apparent
Runoff class: High
Non-irrigated land capability: 4e

Typical Profile

Surface layer:
0 to 3 inches; brown fine sandy loam; strongly acid
Subsurface layer:
3 to 7 inches; brown fine sandy loam; very strongly acid
Subsoil layer:
7 to 15 inches; red clay; very strongly acid
15 to 24 inches; red clay with red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
24 to 57 inches; light brownish gray silty clay loam with red masses of oxidized iron; very strongly acid

57 to 67 inches; light brownish gray clay loam with red masses of oxidized iron; very strongly acid
67 to 73 inches; light brownish gray silty clay loam with yellowish red masses of oxidized iron; very strongly acid

Substratum layer:
73 to 80 inches; light brownish gray silt loam with strong brown masses of oxidized iron; very strongly acid

SaD—Sacul fine sandy loam, 8 to 15 percent slopes

Map Unit Composition

Major Components:
Sacul and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear backslope
Parent material: Clayey marine deposits
Slope: 8 to 15 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2 to 4 ft, apparent
Runoff class: High
Non-irrigated land capability: 6e

Typical Profile

Surface layer:
0 to 3 inches; brown fine sandy loam; strongly acid

Subsurface layer:
3 to 7 inches; brown fine sandy loam; very strongly acid

Subsoil layer:
7 to 15 inches; red clay; very strongly acid
15 to 24 inches; red clay with red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
24 to 57 inches; light brownish gray silty clay loam with red masses of oxidized iron; very strongly acid
57 to 67 inches; light brownish gray clay loam with red masses of oxidized iron; very strongly acid
67 to 73 inches; light brownish gray silty clay loam with yellowish red masses of oxidized iron; very strongly acid

Substratum layer:
73 to 80 inches; light brownish gray silt loam with strong brown masses of oxidized iron; very strongly acid

SaE—Sacul fine sandy loam, 15 to 35 percent slopes

Map Unit Composition

Major Components:
Sacul and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Linear convex backslope
Parent material: Clayey marine deposits
Slope: 15 to 35 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.18 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2 to 4 ft, apparent
Runoff class: Very high
Non-irrigated land capability: 7e

Typical Profile

Surface layer:
0 to 3 inches; brown fine sandy loam; strongly acid
Subsurface layer:
3 to 7 inches; brown fine sandy loam; very strongly acid
Subsoil layer:
7 to 15 inches; red clay; very strongly acid
15 to 24 inches; red clay with red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
24 to 57 inches; light brownish gray silty clay loam with red masses of oxidized iron; very strongly acid
57 to 67 inches; light brownish gray clay loam with red masses of oxidized iron; very strongly acid
67 to 73 inches; light brownish gray silty clay loam with yellowish red masses of oxidized iron; very strongly acid
Substratum layer:
73 to 80 inches; light brownish gray silt loam with strong brown masses of oxidized iron; very strongly acid

SfC—Saffell gravelly fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Saffell and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex linear areas
Parent material: Loamy and gravelly marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.09 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Low
Non-irrigated land capability: 4s

Typical Profile

Surface layer:
0 to 9 inches; brown gravelly fine sandy loam; strongly acid
Subsoil layer:
9 to 17 inches; dark yellowish brown gravelly sandy loam; strongly acid
17 to 28 inches; yellowish red very gravelly loam; very strongly acid
28 to 53 inches; red extremely gravelly clay loam; very strongly acid
Substratum layer:
53 to 80 inches; reddish brown extremely gravelly sandy loam with yellowish brown masses of oxidized iron; very strongly acid

SfD—Saffell gravelly fine sandy loam, 8 to 15 percent slopes

Map Unit Composition

Major Components:
Saffell and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear backslope
Parent material: Loamy and gravelly marine deposits
Slope: 8 to 15 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.09 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None

Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Medium
Non-irrigated land capability: 6s

Typical Profile

Surface layer:
0 to 9 inches; brown gravelly fine sandy loam; strongly acid
Subsoil layer:
9 to 17 inches; dark yellowish brown gravelly sandy loam; strongly acid
17 to 28 inches; yellowish red very gravelly loam; very strongly acid
28 to 53 inches; red extremely gravelly clay loam; very strongly acid
Substratum layer:
53 to 80 inches; reddish brown extremely gravelly sandy loam with yellowish brown masses of oxidized iron; very strongly acid

SiB—Sardis silt loam, 0 to 2 percent slopes, frequently flooded

Map Unit Composition

Major Components:
Sardis and similar soils: 90 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas
Parent material: Loamy alluvium
Slope: 0 to 2 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: About 1.5 to 3 ft, apparent
Runoff class: Very low
Non-irrigated land capability: 4w

Typical Profile

Surface layer:
0 to 6 inches; dark grayish brown silt loam; strongly acid
Subsoil layer:
6 to 13 inches; brown silt loam with yellowish brown masses of oxidized iron; grayish brown iron depletions; strongly acid
13 to 24 inches; brown silt loam with strong brown masses of oxidized iron; gray iron depletions; strongly acid

24 to 36 inches; yellowish brown silt loam with dark yellowish brown masses of oxidized iron; light brownish gray iron depletions; very strongly acid
36 to 60 inches; yellowish brown silty clay loam; gray iron depletions; very strongly acid

Substratum layer:
60 to 80 inches; light brownish gray silt loam with yellowish brown and yellowish red masses of oxidized iron; very strongly acid

SnB—Savannah fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Savannah and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Convex linear areas
Parent material: Loamy marine deposits
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: About 1 to 2.5 ft or to fragipan
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 12 to 30 inches, perched
Runoff class: Low
Non-irrigated land capability: 2e

Typical Profile

Surface layer:
0 to 6 inches; dark grayish brown fine sandy loam; strongly acid

Subsurface layer:
6 to 12 inches; pale brown fine sandy loam; strongly acid

Subsoil layer:
12 to 22 inches; yellowish brown loam; very strongly acid
22 to 28 inches; yellowish brown loam; pale brown iron depletions; very strongly acid
28 to 35 inches; 60 percent yellowish brown and 40 percent light brownish gray loam; gray clay depletions; very strongly acid
35 to 44 inches; 50 percent yellowish brown, 30 percent gray, and 20 percent yellowish red sandy clay loam; very strongly acid
44 to 56 inches; 50 percent yellowish brown, 30 percent gray, and 20 percent yellowish red clay loam; very strongly acid
56 to 80 inches; 50 percent yellowish red, 30 percent gray, and 20 percent yellowish brown sandy clay loam; very strongly acid

SnC—Savannah fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Savannah and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear footslope
Parent material: Loamy marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: About 1 to 2.5 ft or to fragipan
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 12 to 30 inches, perched
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 6 inches; dark grayish brown fine sandy loam; strongly acid
Subsurface layer:
6 to 12 inches; pale brown fine sandy loam; strongly acid
Subsoil layer:
12 to 22 inches; yellowish brown loam; very strongly acid
22 to 28 inches; yellowish brown loam; pale brown iron depletions; very strongly acid
28 to 35 inches; 60 percent yellowish brown and 40 percent light brownish gray loam; gray clay depletions; very strongly acid
35 to 44 inches; 50 percent yellowish brown, 30 percent gray, and 20 percent yellowish red sandy clay loam; very strongly acid
44 to 56 inches; 50 percent yellowish brown, 30 percent gray, and 20 percent yellowish red clay loam; very strongly acid
56 to 80 inches; 50 percent yellowish red, 30 percent gray, and 20 percent yellowish brown sandy clay loam; very strongly acid

SrB—Sawyer very fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Major Components:
Sawyer and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve

Landform position: Convex linear areas
Parent material: Loamy and clayey marine deposits
Slope: 1 to 3 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.15 in/in)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 1.5 to 2.5, perched
Runoff class: Low
Non-irrigated land capability: 2e

Typical Profile

Surface layer:
0 to 7 inches; dark grayish brown very fine sandy loam; strongly acid
Subsurface layer:
7 to 14 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
14 to 22 inches; yellowish brown silt loam with yellowish brown masses of oxidized iron; very strongly acid
22 to 38 inches; yellowish brown silty clay loam with yellowish red and strong brown masses of oxidized iron; very strongly acid
38 to 50 inches; red silty clay loam with yellowish red and reddish yellow masses of oxidized iron; gray clay depletions; gray iron depletions; very strongly acid
50 to 60 inches; gray silty clay with yellow and strong brown masses of oxidized iron; very strongly acid
60 to 80 inches; gray silty clay with masses of red and brownish yellow masses of oxidized iron; extremely acid

SrC—Sawyer very fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Sawyer and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve
Landform position: Linear convex areas
Parent material: Loamy and clayey marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Low (About 0.42 micrometers/sec)
Available water capacity: High (About 0.15 in/in)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Ponding hazard: None

Depth to seasonal water saturation: About 1.5 to 2.5 ft, perched
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 7 inches; dark grayish brown very fine sandy loam; strongly acid
Subsurface layer:
7 to 14 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
14 to 22 inches; yellowish brown silt loam with yellowish brown masses of oxidized iron; very strongly acid
22 to 38 inches; yellowish brown silty clay loam with yellowish red and strong brown masses of oxidized iron; very strongly acid
38 to 50 inches; red silty clay loam with yellowish red and reddish yellow masses of oxidized iron; gray clay depletions; gray iron depletions; very strongly acid
50 to 60 inches; gray silty clay with yellow and strong brown masses of oxidized iron; very strongly acid
60 to 80 inches; gray silty clay with red and brownish yellow masses of oxidized iron; extremely acid

StC—Smithdale fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major Components:
Smithdale and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve
Landform position: Linear convex areas
Parent material: Loamy marine deposits
Slope: 3 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: High (About 0.17 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Low
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsurface layer:
5 to 11 inches; light yellowish brown fine sandy loam; strongly acid

Subsoil layer:
11 to 30 inches; red sandy clay loam; very strongly acid
30 to 50 inches; red sandy clay loam; very strongly acid
50 to 80 inches; red sandy loam; very strongly acid

StD—Smithdale fine sandy loam, 8 to 15 percent slopes

Map Unit Composition

Major Components:
Smithdale and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve
Hillslope position: Linear convex backslope
Parent material: Loamy marine deposits
Slope: 8 to 15 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: High (About 0.17 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Medium
Non-irrigated land capability: 4e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsurface layer:
5 to 11 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
11 to 30 inches; red sandy clay loam; very strongly acid
30 to 50 inches; red sandy clay loam; very strongly acid
50 to 80 inches; red sandy loam; very strongly acid

StE—Smithdale fine sandy loam, 15 to 35 percent slopes

Map Unit Composition

Major Components:
Smithdale and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Coastal Plain interfluve
Hillslope position: Linear convex backslope

Parent material: Loamy marine deposits
Slope: 15 to 35 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: High (About 0.17 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: High
Non-irrigated land capability: 6e

Typical Profile

Surface layer:
0 to 5 inches; brown fine sandy loam; strongly acid
Subsurface layer:
5 to 11 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
11 to 30 inches; red sandy clay loam; very strongly acid
30 to 50 inches; red sandy clay loam; very strongly acid
50 to 80 inches; red sandy loam; very strongly acid

SuB—Smithton fine sandy loam, 0 to 2 percent slopes

Map Unit Composition

Major Components:
Smithton and similar soils: 85 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Nearly level stream terrace
Landform position: Concave linear areas
Parent material: Loamy marine deposits
Slope: 0 to 2 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderate (About 1.40 micrometers/sec)
Available water capacity: High (About 0.17 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: Very low
Non-irrigated land capability: 3w

Typical Profile

Surface layer:
0 to 4 inches; dark grayish brown fine sandy loam; strongly acid

Subsurface layer:
4 to 9 inches; light brownish gray fine sandy loam with yellowish brown masses of oxidized iron; strongly acid
Subsoil layer:
9 to 23 inches; light brownish gray fine sandy loam with yellowish brown masses of oxidized iron; very strongly acid
23 to 37 inches; light brownish gray fine sandy loam with yellowish brown masses of oxidized iron; very strongly acid
37 to 55 inches; gray loam with dark yellowish brown and brownish yellow masses of oxidized iron; very strongly acid
55 to 80 inches; gray silty clay loam with yellowish brown and brownish yellow masses of oxidized iron; extremely acid

UnA—Una silty clay loam, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Major Components:
Una and similar soils: 90 percent

Component Descriptions

MLRA: 135B—Cretaceous Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas
Parent material: Acid clayey alluvium
Slope: 0 to 1 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: About 0 to 1 ft, apparent
Runoff class: Low
Non-irrigated land capability: 4w

Typical Profile

Surface layer:
0 to 5 inches; very dark grayish brown silty clay loam; slightly acid
Subsoil layer:
5 to 13 inches; gray clay with brownish yellow masses of oxidized iron; strongly acid
13 to 25 inches; gray clay with yellowish brown masses of oxidized iron; very strongly acid
25 to 54 inches; gray silty clay with yellowish brown masses of oxidized iron; very strongly acid
54 to 64 inches; light gray silty clay with brownish yellow masses of oxidized iron; very strongly acid

64 to 80 inches; light brownish gray silty clay loam with dark yellowish brown masses of oxidized iron; very strongly acid

UrA—Urbo silt loam, 0 to 1 percent slopes, occasionally flooded

Map Unit Composition

Major Components:
Urbo and similar soils: 85 percent

Component Descriptions

MLRA: 135B—Cretaceous Western Coastal Plain
Landform: Flood plain
Landform position: Linear linear areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Ponding hazard: None
Depth to seasonal water saturation: About 1 to 2 ft, apparent
Runoff class: Low
Non-irrigated land capability: 2w

Typical Profile

Surface layer:
0 to 6 inches; grayish brown silt loam with brown masses of oxidized iron; moderately acid
6 to 11 inches; dark grayish brown silt loam; grayish brown iron depletions; strongly acid
Subsoil layer:
11 to 36 inches; grayish brown silty clay loam with brownish yellow masses of oxidized iron; very strongly acid
36 to 60 inches; gray silty clay with dark yellowish brown masses of oxidized iron; very strongly acid
60 to 80 inches; gray silty clay with brownish yellow masses of oxidized iron; very strongly acid

WaC—Warnock fine sandy loam, 1 to 7 percent slopes

Map Unit Composition

Major Components:
Warnock and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Loamy marine deposits
Slope: 1 to 7 percent, north aspect
Surface fragments: None
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderate (About 4.00 micrometers/sec)
Available water capacity: Moderate (About 0.14 in/in)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 2.5 to 4 ft, perched
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 10 inches; brown fine sandy loam; strongly acid
Subsurface layer:
10 to 16 inches; light yellowish brown fine sandy loam; strongly acid
Subsoil layer:
16 to 35 inches; yellowish brown sandy clay loam; very strongly acid
35 to 47 inches; yellowish brown sandy clay loam; light brownish gray iron depletions; very strongly acid
47 to 61 inches; brownish yellow sandy clay loam with red masses of oxidized iron; light brownish gray iron depletions; very strongly acid
61 to 80 inches; red loam with brownish yellow masses of oxidized iron; light brownish gray iron depletions; very strongly acid

WxC—Wilcox silty clay loam, 1 to 8 percent slopes

Map Unit Composition

Major Components:
Wilcox and similar soils: 95 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Landform position: Linear convex areas
Parent material: Clayey marine deposits derived from shale
Slope: 1 to 8 percent, north aspect
Surface fragments: None
Depth to restrictive feature: 40 to 60 inches to bedrock, paralithic
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 1.5 to 3 ft, apparent
Runoff class: Medium
Non-irrigated land capability: 3e

Typical Profile

Surface layer:
0 to 4 inches; brown silty clay loam; strongly acid
Subsoil layer:
4 to 16 inches; red clay; light brownish gray iron depletions; very strongly acid
16 to 30 inches; red clay with masses of oxidized iron; light brownish gray iron depletions; very strongly acid
30 to 46 inches; gray clay with red and brownish yellow masses of oxidized iron; very strongly acid
46 to 55 inches; light brownish gray clay with yellowish red and dark yellowish brown masses of oxidized iron; very strongly acid
Substratum layer:
55 to 59 inches; light brownish gray clay with light red masses of oxidized iron; very strongly acid
59 to 80 inches; light brownish gray clay bedrock with yellowish brown and strong brown masses of oxidized iron; very strongly acid

WxD—Wilcox silty clay loam, 8 to 15 percent slopes

Map Unit Composition

Major Components:
Wilcox and similar soils: 100 percent

Component Descriptions

MLRA: 133B—Western Coastal Plain
Landform: Interfluve
Hillslope position: Convex linear backslope
Parent material: Clayey marine deposits derived from shale
Slope: 8 to 15 percent, north aspect
Surface fragments: None
Depth to restrictive feature: 40 to 60 inches to bedrock, paralithic
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Very low (About 0.01 micrometers/sec)
Available water capacity: High (About 0.19 in/in)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: About 1.5 to 3 ft, apparent
Runoff class: High
Non-irrigated land capability: 6e

Typical Profile

Surface layer:
0 to 4 inches; brown silty clay loam; strongly acid

Subsoil layer:

4 to 16 inches; red clay; light brownish gray iron depletions; very strongly acid

16 to 30 inches; red clay with masses of oxidized iron; light brownish gray iron depletions; very strongly acid

30 to 46 inches; gray clay with red and brownish yellow masses of oxidized iron; very strongly acid

46 to 55 inches; light brownish gray clay with yellowish red and dark yellowish brown masses of oxidized iron; very strongly acid

Substratum layer:

55 to 59 inches; light brownish gray clay with light red masses of oxidized iron; very strongly acid

59 to 80 inches; light brownish gray clay bedrock with yellowish brown and strong brown masses of oxidized iron; very strongly acid

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 eroded 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.

About 69,344 acres in the survey area, or nearly 17 percent of the total acreage, meets the soil requirements for prime farmland. About 50,000 acres of this prime farmland is used for crops. The crops grown on this land are mainly corn, rice, soybeans, and winter grains. About 46,732 additional acres, or nearly 11 percent of the survey area, would meet the requirements for prime farmland if water is drained from the soil. 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 and their extent are listed in Table 5. 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 locations of these soils are shown on the detailed soil maps at the back of this publication. The soil qualities that affect use and management are described under the heading “Detailed Soil Map Unit Descriptions”.

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 for predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other 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 that is in harmony with nature.

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 numeric.

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 *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good, fair,* and *poor*.

Numeric Ratings

Numeric 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

General management needed for crops and pasture is suggested in this section. The main crops, hay or pasture plants best suited to the soils, including some not commonly grown in the survey area, are identified. The system of land capability classification used by the Natural Resources Conservation Service is explained; and the estimated yields of the main crops and hay and pasture plants are listed for each soil.

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 Unit Descriptions”. Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

In 1992, only about 22,000 acres in Nevada County were used as cropland or hayland. Of this total, only about 6,000 acres are harvested, mostly for hay crops (USDC, 2004). Fewer than 1,000 acres of cropland are in the county. Corn and soybeans in the Prescott area and truck patches (watermelon, peas, other vegetables, and melons) in the southern part are the major cropland areas in Nevada County.

The total acreage of pastureland, including grazed woodland, was only about 16,000 acres. The acreage used for crops and pasture has gradually decreased over the past 30 years. Most of the acreage that is no longer used for crops or pasture was converted to woodland. The acreage of row crops is extremely small. Most of the soils in the county are poorly suited, very poorly suited, or unsuited to intensive use as cropland because of slope, wetness, or flooding.

Contour farming, grassed waterways, and terraces are needed on the more sloping soils that are used for cultivated crops. Where the hazard of erosion is severe or very severe, annual cover crops should be grown regularly in the cropping system. High-residue crops, cover crops, and proper management of residue help to maintain tilth. Shredding crop residue and spreading it evenly on the surface can help to control erosion and add organic matter to the soil. Conservation tillage is needed in areas where the hazard of erosion is a limitation. In general, the soils of the county have a low content of nitrogen, potassium, phosphorous, calcium, and organic matter. The kind and amount of fertilizer applied should be based on soil tests, the kind of crop to be grown, and expected yields. The application of lime improves production on most soils. Lime is generally needed for the satisfactory production of alfalfa, vegetables, and other specialty crops.

Portions of the Blackland Prairie of Arkansas cover the northwest quadrant of the county. Most of this area is in bermuda and bahiagrasses. The quality of Blackland soils is generally poor for crop and tree production and its use for tame pastures has nearly eliminated native grasses and forbs that used to thrive on these soils.

Many of the soils in the county are well suited to improved pasture even though they are not used for this purpose. Perennial grasses or legumes or a mixture of both are grown in some places for pasture and hay. The mixtures generally consist of a suitable legume and either a warm- or cool-season perennial grass. Coastal bermudagrass, common bermudagrass, and bahiagrass are the most common warm-season perennials. These grasses are propagated by sprigging, generally in the spring. Coastal bermudagrass and bahiagrass produce good quality forage. Tall fescue is the chief cool-season perennial grass grown in the survey area. It is propagated by seeding, generally in the fall. It grows well, however, only on soils that have favorable soil moisture. All the specified grasses respond well to fertilizer, particularly nitrogen. White clover, crimson clover, and annual lespedeza are the most commonly grown legumes. Mixtures of grasses and legumes may require applications of phosphorous, potash, and lime. The amount applied should be based on soil tests.

Proper grazing management is essential to the production of high quality forage, to ensure stand survival, and to help control erosion. Grazing helps to maintain sufficient and generally vigorous top growth during the growing season. Good management includes the restriction of grazing tall fescue in the hot, dry summer. Brush and weed control are generally needed. Rotation grazing and the application of fertilizer are also needed. A small acreage in the county is used for commercial specialty crops, home orchards, and gardens. Although most of this acreage produces little income, the enterprises are important. Most farm families and many urban families either freeze or can homegrown fruits and vegetables for personal use.

Yields per Acre

The average yields per acre that can be expected from principal crops under a high level of management are shown in Table 6. In any given year, yields may be higher or lower than those indicated in the tables because of variations in rainfall and other climatic factors.

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 are also 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.

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 Table 6 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 classifications are given in Table 6. Land capability classification shows, in a general way, the suitability of soils for use as cropland. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system (USDA, 1961), soils are generally grouped at three levels—capability class, subclass, and unit. Only class and subclass are used in this survey. Capability classes, the broadest groups, are designated by numerals 1 through 7. 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 they 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 a 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.

There are no subclasses in class 1 because the soils of this class have few limitations. The soils in class 5 are subject to little or no erosion, but they have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation. Class 5 contains only the subclasses indicated by w, s, or c. The capability classification of each map unit is given in the section “Detailed Soil Map Unit Descriptions” and in the yields table.

Forest Management and Productivity

At one time virgin pine and hardwood forest covered all of Nevada County except for areas of Blackland located in the northwestern part of the county, which consisted of prairies, native grasses, and scattered hardwood trees.

Forest now covers 82 percent of the county or about 325,200 acres, interspersed with areas of pastureland and cropland. Approximately 50 percent, or 162,500 acres, of the forest is owned by private non-industrial landowners; 44 percent, or about 143,000, acres is owned by industrial landowners; and 6.0 percent, or about 19,700 acres, is owned by the State (USDA-FS, 1988). There is no Federal ownership in Nevada County.

Forest types and approximate acres of each are listed as follows:

Loblolly – other Pine = 104,400 acres
Oak - Pine = 67,500 acres
Oak - Hickory = 98,200 acres
Oak- Cypress = 49,100 acres

Forest products contribute substantially to the county's economy. One major sawmill and several wood-using industries produce products such as chips, pallets, and furniture. Two seed orchards and one nursery (fig. 4) that produce genetically improved seedlings are located in the county.

Forest Productivity

In Table 7a, the potential productivity of merchantable or common trees on a soil is expressed as a site index and as a volume number. The site index is the average height, in feet, that dominant and co-dominant trees of a given species attained in 50 years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet at http://soils.usda.gov/technical/nfmanual/.

The volume of wood fiber, a number, is the yield likely to be produced by the most important tree species. This number, expressed in cubic feet (Doyle Rule) per acre per year and calculated at the age of culmination of the mean annual increment

Figure 4. Pine seedlings being grown on Briley soil.

(CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand. Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forest Management

In Tables 7b through 7e, interpretive ratings are given for various aspects of forest management. Some rating class terms indicate the degree to which the soils are suited to a specified forest management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable and fair performance can be expected. Some maintenance is needed to produce these fair results. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

Numeric 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 no limitation (0.00) and the point at which a soils feature has the greatest negative impact on the specified forest management practice (1.00). Rating class terms for fire damage and seedling mortality are expressed as low, moderate, and high. Where these terms are used, the numeric ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for forest management practices. More detailed information about the criteria used in the ratings is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet at http://soils.usda.gov/technical/nfmanual/.

For limitations affecting construction of *haul roads* and *log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities; *moderate* indicates that one or more limitations can cause some difficulty in construction; and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of suitability for log landings are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forest equipment. The hazard is described as *slight, moderate,* or *severe*. A rating of *slight* indicates that the soil is subject to little or no rutting; *moderate* indicates that rutting is likely; and *severe* indicates that ruts form readily.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as *slight, moderate, severe,* or *very severe*. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as *slight, moderate,* or *severe*. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance; and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as *well suited, moderately suited,* or *poorly suited* to this use.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as *well suited, moderately suited, poorly suited,* or *unsuited* to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as *well suited, moderately suited,* or *poorly suited* to this use.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as *well suited, poorly suited,* or *unsuited* to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as *well suited, poorly suited,* or *unsuited* to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a *low, moderate,* or *high* potential for this kind of damage. The ratings indicate an evaluation of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a *low, moderate,* or *high* potential for seedling mortality.

Recreational Development

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 numeric. 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.

Numeric 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 sulfide containing 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.

Fish and Wildlife Habitat

Paul Brady, Biologist, Natural Resources Conservation Service, helped prepare this section.

Timber and wildlife are important resources in rural Nevada County. Eighty-two percent of the total acres in the county are forested. Timber companies own just over 44 percent of these forests and most of their land is leased to hunting clubs for mainly white-tailed deer, wild turkey, and squirrels.

Forestland in the county includes 104,400 acres of loblolly and shortleaf pines, 98,200 acres of hickory, 67,500 acres of mixed oaks and pines, and 49,100 acres of bottomlands with various oaks, gums, and cypress. These bottomlands are along the major streams and constitute the highest quality habitats in the county for deer, turkey, squirrels, furbearers, and songbirds. Pastures in Nevada County cover about 16,000 acres, mainly in bermudagrass and bahiagrasses, and relatively small acreages in dallisgrass, fescue, clovers, and rye.

The western edge of the state-owned Poison Springs Wildlife Management Area extends into northeastern Nevada County. About 17,500 acres of this management area lie within Nevada County and represent about 90 percent of the state-owned land.

Major plant groups and species important to wildlife in Nevada County include: oaks, hickories, dogwoods, hawthorns, shortleaf pine, loblolly pine, red cedar, blackberry, elderberry, viburnums, sumacs, lespedeza, panicums, partridge pea, common ragweed, tickclover, and vetches.

The abundant forests of hardwoods and pines, interspersed pastures, fencerow, and numerous edges provide an abundance of food and cover for white-tailed deer, wild turkey, squirrels, bobwhite quail, raccoons, coyotes, opossums, foxes, rabbits, owls, numerous non-game birds, small mammals, reptiles, and other wildlife. White-tailed deer are very abundant throughout the county and a substantial wild turkey population is increasing.

Major aquatic resources in the county are the Little Missouri River (the county's northern border), its two main tributaries (Terre Rouge Creek in the northwest and Caney Creek in the east) and Dorcheat Bayou in the southwest. Twenty-eight lakes (more than five acres each) cover about 350 acres and farm ponds in the county average about 0.3 to 0.5 acres each.

The Little Missouri River provides a good fishery for catfish as well as populations of largemouth bass, bluegills, crappie, channel catfish, other game fish, and numerous non-game fish.

The streams, lakes, and ponds in Nevada County all provide varying populations of largemouth bass, bluegill, and channel catfish.

In tables 9a, 9b, and 9c, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The ratings in the tables are both verbal and numeric. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the element or kind of habitat. *Not limited* indicates that the soil has features that are very favorable for the element or kind of habitat. 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. Creating, improving, or maintaining habitat is impractical or impossible.

Numeric ratings in the tables indicate the severity of individual limitations. As many as three soil features may be listed for each component. The overall limitation class for the component is based on the most severe limitation. 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 elements of wildlife habitat are described in the following paragraphs. Selection of appropriate species should be made from a list of locally adapted species.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture are also considerations.

Domestic grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture are also considerations.

Upland wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture are also considerations.

Upland shrubs and vines are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs and vines are depth of the root zone, available water capacity, salinity, and soil moisture.

Upland deciduous trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees are depth of the root zone, available water capacity, and wetness.

Upland coniferous plants are cone-bearing trees, shrubs, or ground cover that provides habitat or supplies food in the form of browse, seed, or fruitlike cones. Soil properties and features that affect the growth of coniferous trees are depth of the root zone, the amount of water available to plants, and wetness.

Upland mixed deciduous-conifer trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, browse, seeds, and foliage. Soil properties and features that affect the growth of these trees are depth of the root zone, available water capacity, and wetness.

Riparian herbaceous plants are annual and perennial native or naturally established grasses and forbs that grow on moist or wet sites. Soil properties and features affecting riparian herbaceous plants are surface texture, wetness, flooding, ponding, and surface stones.

Riparian shrubs, vines, and trees are bushy woody plants and trees that grow on moist or wet sites. Soil properties and features affecting these plants are surface texture, wetness, flooding, ponding, and surface stones.

Freshwater wetland plants are grasses, forbs, and shrubs that are adapted to wet soil conditions. The soils suitable for this habitat generally occur adjacent to springs, seeps, depressions, bottomlands, marshes, or backwater areas of flood plains. Most areas are ponded for some period of time during the year. Soil properties and features affecting these plants are surface texture, wetness, ponding, and soil reaction.

Irrigated freshwater wetland plants are grasses, forbs, and shrubs that are adapted to wet soil conditions. The soils suitable for this habitat generally occur in areas of cropland, previously cropped areas, and marginal areas associated with cropland and wetlands. These areas may be ponded for some period of time during the year. These areas are generally suitable for the temporary or permanent restoration of wetland features. Soil properties and features affecting these plants are surface texture, permeability, wetness, ponding, and soil reaction.

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 data in the tables described under the heading “Soil Properties”.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and

construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the “Glossary”.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 10a and 10b 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 numeric. 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.

Numeric 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 sulfide containing 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 11a and 11b 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 numeric. 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.

Numeric 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, non-rippable 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 and Excavating Materials

The soils of the survey area are rated in Tables 12a and 12b as a source of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 12a 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 sand and gravel. 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 numeric ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. 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 reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the tables. The numeric ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill.

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 horizontal 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).

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.

Water Management

The soils of the survey area are rated in Table 13 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 numeric. 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.

Numeric 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).

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.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage. Tables 14a, 14b, and 14c show the degree and kind of soil limitations affecting the application and treatment of agricultural waste. Agricultural waste management systems include systems that not only dispose of and treat organic waste or wastewater, but also are beneficial to crops. They include application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater through irrigation.

Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places, it has a high content of sodium and chloride. In the context of this table, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly has a very low content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. *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. *Limited* indicates that the soil has one or more features that are significant limitations for the specified use. The limitations can be overcome, but overcoming them generally requires special design, soil reclamation, or installation procedures that may result in additional expense. Fair performance and moderate or high 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.

Numeric ratings in the tables indicate the severity of individual limitations. As many as three soil features may be listed for each component. The overall limitation rating for the component is based on the most severe limitation. 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 specified waste management practice (1.00) and the point at which the soil feature is not a limitation (0.00).

Land application of manure and food-processing waste not only disposes of waste material but also improves crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste.

Land application of sewage sludge not only disposes of waste material but also improves crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and that have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features, listed in tables, are explained on the following pages.

Soil properties are determined 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 grain-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 shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classification, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 15 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, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

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.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

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 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 Soil Properties

Table 16 shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major 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.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

*Sil*t as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each major 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 greatly affect the fertility and physical condition of the soil. They determine 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 (oven dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3-bar moisture tension. Weight is determined after drying the soil at 105 degrees C. In this table, the estimated moist bulk density of each major 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. A bulk density of more than 1.6 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields. Entries under Saturated hydraulic conductivity class apply to the entire soil profile.

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 major soil layer. The capacity varies, depending on soil properties that affect the retention of water and the depth of the root zone. 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, other structures, and plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, 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 factor Kw (formerly K factor) indicates the susceptibility of a soil to sheet and rill erosion by water. Factor Kw is one of six factors used in the Universal Soil Loss Equation (USLE), and may be used in the Revised Universal Soil Loss

Equation (RUSLE), to predict the average annual rate of soil loss by sheet and rill erosion. Losses are expressed in tons per acre per year. These estimates are based primarily on percentage of silt, sand, and organic matter (up to 4 percent) and on soil structure and permeability. Factor Kw is adjusted for the effect of rock fragments. Values of Kw range from 0.02 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size. Factor Kf is one of the factors that may be used in 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.

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 described in the “National Soil Survey Handbook,” which is available in local offices of the Natural Resources Conservation Service or on the Internet at http://soils.usda.gov/technical/handbook/.

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 Soil Properties

Table 17 shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major 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.

Soil Features

Table 18 describe gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

Depth to a restrictive layer is shown for all soils that are underlain by a restrictive layer at a depth of 5 to 6 feet or less. For some soils the limited depth to a restrictive layer is part of the definition of the series. The depths shown are based on measurements made in many soil borings and on other observations during soil mapping. The kind of restrictive layer (fragipan, bedrock, densic, lithic, or paralithic contact) and its hardness as it relates to ease of excavation is also shown (USDA, 2006).

Table 18 gives estimates of the *risk of corrosion*. The estimates are used in land use planning that involves engineering considerations. Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that dissolves 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 in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than steel 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 is also expressed as low, moderate, or high. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Table 19 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 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.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high. 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. The table indicates, by month, depth to the top (upper limit) and base (lower limit) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as *none, rare, occasional,* and *frequent*. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as *none, very rare, rare, occasional, frequent,* and *very frequent*. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year 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 is 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.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 20 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in sol. An example is Ultisol.

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 Aquult (Aqu, meaning wet conditions, plus ult, from Ultisol).

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 Paleaquults (Pale, meaning old development, plus aquult, the suborder of the Ultisol that has aquic properties).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective Typic identifies the subgroup that typifies the great group. An example is Typic Paleaquults.

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-loamy, siliceous, semiactive, thermic Typic Paleaquults.

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 would be Smithton which is a coarse-loamy, siliceous, semiactive, thermic Typic Paleaquult.

Series Descriptions 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” (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (Soil Survey Staff, 1999) “Keys to Soil Taxonomy” (Soil Survey Staff, 1998) and “Field book for describing and sampling soils, Version 2.0” (Schoeneberger, 2002). Unless otherwise indicated, colors in the descriptions are for moist soil and broken faced peds. 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”.

Adaton Series

MLRA: Western Coastal Plain
Geomorphic Setting: Upland flats and depressions
Parent Material: Silty marine deposits
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Low
Soil Depth Class: Very deep
Shrink-swell Potential: Moderate
Slope: 0 to 2 percent

Associated Soils

Laneburg
Pikeville
Prescott
Wilcox

Taxonomic Classification

Fine-silty, mixed, active, thermic Typic Endoaqualfs

Typical Pedon

Adaton silt loam in an area of Adaton silt loam, 0 to 2 percent slopes; located in a wooded area; NW1/4 of NW1/4 of SE1/4 Sec. 22, T. 12 S., R. 23 W.

Ap—0 to 7 inches; light brownish gray (10YR 6/2) silt loam; weak fine granular structure; friable; many fine and medium roots; 10 percent medium distinct brown (10YR 4/3) masses of oxidized iron; 2 percent fine iron-manganese concretions; strongly acid; clear smooth boundary.

Btg1—7 to 20 inches; gray (10YR 6/1) silt loam; weak medium subangular blocky structure; friable; few fine roots; patchy faint clay films on faces of peds; 10 percent medium distinct reddish yellow (7.5YR 6/8) and 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 2 percent iron-manganese concretions; very strongly acid; gradual wavy boundary.

Btg2—20 to 35 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; patchy faint clay films; 10 percent medium distinct reddish yellow (7.5YR 6/8) masses of oxidized iron; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 2 percent iron-manganese concretions; very strongly acid; gradual wavy boundary.

Btg3—35 to 50 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; firm; few fine roots; patchy faint clay films on faces of peds; 10 percent medium distinct light red (2.5YR 6/8) and 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; 2 percent fine iron-manganese concretions; very strongly acid; gradual wavy boundary.

Btg4—50 to 60 inches; gray (10YR 5/1) silty clay; moderate medium subangular blocky structure; firm, slightly sticky, moderately plastic; patchy clay films on faces of peds; 10 percent fine distinct brownish yellow (10YR 6/6) and 10 percent fine distinct light red (2.5YR 6/8) masses of oxidized iron; 25 percent fine iron-manganese concretions; very strongly acid; clear wavy boundary.

Cg—60 to 80 inches; light brownish gray (2.5Y 6/2) clay; massive; very firm, moderately sticky, moderately plastic; 10 percent fine distinct light olive brown (2.5Y 5/6) masses of oxidized iron; 2 percent iron-manganese concretions; few slickensides that do not intersect; very strongly acid.

Range in Characteristics

A horizon:
Color - hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 to 4
Texture - silt loam
Reaction - strongly acid; except for surface layers that have been limed

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - silt loam, silty clay loam, or silty clay
Redoximorphic concentrations - shades of yellow or brown
Reaction - strongly acid or very strongly acid

Cg horizon:
Color - hue of 2.5Y or 10YR, value of 5 or 6, and chroma of 1 or 2
Texture - silty clay loam, silty clay, or clay
Redoximorphic concentrations - shades of brown or yellow
Reaction - strongly acid or very strongly acid

Amy Series

MLRA: Western Coastal Plain
Geomorphic Setting: On nearly level stream terrace
Position on Terrace: Tread
Parent Material: Silty alluvium
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Low
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 0 to 2 percent

Associated Soils

Guyton
Harleston
Smithton
Una
Urbo

Taxonomic Classification

Fine-silty, siliceous, semiactive, thermic Typic Endoaquults

Typical Pedon

Amy silt loam in an area of Amy silt loam, 0 to 2 percent slopes; located in a wooded area; SW1/4 SE1/4 SE 1/4 Sec. 31, T. 11 S., R. 21 W.

A—0 to 3 inches; grayish brown (10YR 5/2) silt loam; weak fine granular structure; friable; common fine roots; strongly acid; clear smooth boundary.

Eg—3 to 11 inches; light brownish gray (10YR 6/2) silt loam; weak fine subangular blocky structure; friable; common fine roots; very strongly acid; clear smooth boundary.

Btg1—11 to 40 inches; gray (10YR 6/1) silt loam; moderate medium subangular blocky structure; friable; few fine roots; 2 percent distinct clay films on faces of peds; 10 percent medium distinct yellowish brown (10YR 5/6) and 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; tongues and interfingers of gray (10YR 7/1) clay depletions make up less than 8 percent of the volume; few iron and manganese concretions; very strongly acid; clear wavy boundary.

Btg2—40 to 62 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; friable; 2 percent distinct clay films on surfaces along pores; 10 percent medium distinct yellowish brown (10YR 5/6) and 10 percent medium distinct red (2.5YR 5/6) masses of oxidized iron; few gray (10YR 7/1) clay depletions on faces of peds; very strongly acid; clear wavy boundary.

Btg3—62 to 72 inches; light brownish gray (10YR 6/2) silty clay loam; moderate medium subangular blocky structure; firm; 2 percent distinct clay films on surfaces along pores; 10 percent medium distinct strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Cg—72 to 80 inches; light brownish gray (2.5Y 6/2) silty clay loam; massive; firm; 10 percent medium distinct red (2.5YR 5/6) masses of oxidized iron; extremely acid.

Range in Characteristics

Solum thickness: greater than 40 inches

A horizon:
Color- hue of 10YR, value of 4 or 5, and chroma of 1 or 2
Texture - silt loam
Reaction - moderately acid or very strongly acid

Eg horizon:
Color - hue of 10YR, value of 6 or 7, and chroma of 1 or 2
Texture - silt loam, very fine sandy loam, or loam
Reaction - strongly acid or very strongly acid

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture - silt loam or silty clay loam
Reaction - strongly acid or very strongly acid
Redoximorphic concentration and depletions - shades of brown or gray

Cg horizon:
Color - hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture - silty clay loam, silt loam, or loam
Reaction - strongly acid or very strongly acid
Redoximorphic concentrations - shades of brown

Angie Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Clayey marine deposits
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Low
Soil Depth Class: Very deep
Shrink-swell Potential: High
Slope: 1 to 8 percent

Associated Soils

Bowie
Rosalie
Sacul
Sawyer

Taxonomic Classification

Fine, mixed, semiactive, thermic Aquic Paleudults

Typical Pedon

Angie fine sandy loam in an area of Angie fine sandy loam, 1 to 8 percent slopes; located in a wooded area; SW1/4 NW1/4 SW1/4 Sec. 9, T. 15 S., R. 21 W.

A—0 to 7 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

E—7 to 14 inches; yellowish brown (10YR 5/4) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

Bt1—14 to 19 inches; yellowish brown (10YR 5/6) silty clay loam; weak medium subangular blocky structure; friable; many fine roots; 2 percent faint clay films on faces of peds; 2 percent medium faint brownish yellow (10YR 6/6) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt2—19 to 26 inches; yellowish brown (10YR 5/8) silty clay loam; weak medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 10 percent medium distinct brownish yellow (10YR 6/6) and 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid; gradual wavy boundary.

Bt3—26 to 35 inches; brownish yellow (10YR 6/6) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 10 percent medium prominent yellowish red (5YR 5/8) and 10 percent medium distinct light brownish gray (10YR 6/2) iron depletions; very strongly acid; gradual wavy boundary.

Btg1—35 to 55 inches; gray (10YR 6/1) silty clay; moderate medium subangular blocky structure; firm; 2 percent faint clay films on faces of peds; 10 percent medium prominent red (2.5YR 5/8) and 10 percent medium distinct brownish yellow (10YR 6/6) masses of oxidized iron; few fine iron and manganese concretions; very strongly acid; gradual wavy boundary.

BCg—55 to 65 inches; gray (10YR 6/1) silty clay; weak coarse subangular blocky structure; firm; 10 percent medium distinct brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Cg—65 to 80 inches; light brownish gray (2.5Y 6/2) silty clay; massive; firm; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; extremely acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 3 to 6, and chroma of 2 or 3
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon:
Color - hue of 10YR, value of 4 to 6, and chroma of 3 or 4
Texture - fine sandy loam or very fine sandy loam.
Reaction - strongly acid or very strongly acid

Bt horizon:
Color - hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 8
Texture - silty clay loam, silty clay, or clay
Redoximorphic concentrations and depletions - shades of yellow, brown, red, or gray
Reaction - strongly acid or very strongly acid

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture - silty clay, clay, or silty clay loam
Redoximorphic concentrations and depletions - shades of red, yellow, brown, or gray
Reaction - strongly acid or very strongly acid

BCg and Cg horizons:
Color - hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture - silty clay or clay
Redoximorphic concentrations and depletions - shades of yellow, brown, red, or gray
Reaction - strongly acid to extremely acid

Bibb Series

MLRA: Western Coastal Plain
Geomorphic Setting: On flood plain
Parent Material: Stratified loamy and sandy alluvium
Drainage Class: Poorly drained

Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 0 to 1 percent

Associated Soils

Guyton
Harleston
Smithton
Warnock

Taxonomic Classification

Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents

Typical Pedon

Bibb fine sandy loam in an area of Bibb fine sandy loam, 0 to 1 percent slopes, frequently flooded; located in a wooded area; NW1/4 NW 1/4 SW1/4 Sec. 14, T. 13 S., R. 20 W.

A—0 to 3 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; friable; common fine and medium roots; very strongly acid; abrupt smooth boundary.

Ag—3 to 13 inches; grayish brown (10YR 5/2) sandy loam; weak fine granular structure; friable; common fine and medium roots; 2 percent fine dark yellowish brown (10YR 4/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

Cg1—13 to 40 inches; gray (10YR 5/1) sandy loam; massive; friable; few fine roots; 10 percent medium distinct brownish yellow (10YR 6/8) and 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

Cg2—40 to 60 inches; light brownish gray (10YR 6/2) sandy loam; massive; friable; few fine roots; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; few thin silt loam strata; very strongly acid; clear smooth boundary.

Cg3—60 to 80 inches; light brownish gray (2.5Y 6/2) very fine sandy loam; massive; friable; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; common thin strata of silt loam and loamy fine sand; very strongly acid.

Range in Characteristics

A horizon:
Color - hue of 10YR, value of 3 to 5, and chroma of 1 to 3
Texture - fine sandy loam
Reaction - strongly acid or very strongly acid

Ag horizon:
Color - hue of 10YR, value of 3 to 5, and chroma of 1 or 2
Texture - fine sandy loam or sandy loam
Redoximorphic concentrations - shades of brown
Reaction - strongly acid or very strongly acid

Cg horizon:

Color - hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2; or value of 4 or 5 and chroma of 1

Texture - sandy loam, very fine sandy loam, loam, silt loam, loamy fine sand, or stratified with these textures

Redoximorphic concentrations and depletions - shades of brown or yellow

Reaction - strongly acid or very strongly acid

Bowie Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Loamy marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Moderate
Slope: 1 to 8 percent

Associated Soils

Angie
Rosalie
Sacul
Savannah
Sawyer
Smithdale
Warnock

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Plinthic Paleudults

Typical Pedon

Bowie fine sandy loam in an area of Bowie fine sandy loam, 3 to 8 percent slopes; located in a wooded area; SE1/4 NW1/4 NW 1/4 Sec. 30, T. 13 S., R. 21 W.

A—0 to 5 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

E—5 to 10 inches; light yellowish brown (10YR 6/4) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

Bt1—10 to 21 inches; yellowish brown (10YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; many fine roots; few fine pores; 2 percent faint clay films on faces of peds; about 2 percent by volume iron stone pebbles; very strongly acid; clear smooth boundary.

Bt2—21 to 40 inches; strong brown (7.5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 10 percent patchy faint clay films on faces of peds; about 2 percent by volume iron stone pebbles; about 3 percent by volume nodular plinthite; very strongly acid; clear smooth boundary.

Btv—40 to 50 inches; yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; friable; few fine pores; 10 percent faint clay films on faces of peds; 10 percent medium distinct red (2.5YR 4/6) masses of oxidized iron; 10 percent medium distinct light gray (10YR 7/1) iron depletions; about 5 to 10 percent by volume brittle masses; about 8 percent by volume nodular plinthite; very strongly acid; gradual smooth boundary.

B't—50 to 80 inches; red (2.5YR 4/6) clay loam; moderate coarse subangular blocky structure; friable; 10 percent continuous faint clay films; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 10 percent medium distinct light gray (10YR 7/1) iron depletions; slightly brittle; about 4 percent by volume nodular plinthite; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches
Ironstone pebbles: 0 to 5 percent by volume throughout

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon:
Color - hue of 10YR, value of 4 to 6, and chroma of 3 or 4
Texture - fine sandy loam or loamy fine sand
Reaction - strongly acid or very strongly acid

Bt horizon:
Color - hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 6
Texture - sandy clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of brown and red
Reaction - very strongly acid or strongly acid
Plinthite - 0 to 4 percent by volume

Btv horizon:
Color - hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 6
Texture - sandy clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of gray, brown, and red
Reaction - strongly acid or very strongly acid
Plinthite - 5 to 10 percent by volume

B't horizon:
Color - hue of 10YR or 2.5YR, value of 4 to 6, and chroma of 4 to 8
Texture - sandy clay loam or clay loam
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - strongly acid or very strongly acid
Plinthite - 0 to 4 percent by volume

Briley Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Sandy and loamy marine deposits
Drainage Class: Well drained

Saturated Hydraulic Conductivity Class: High
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 8 percent

Associated Soils

Darden
Rosalie
Ruston
Sacul
Smithdale
Warnock

Taxonomic Classification

Loamy, siliceous, semiactive, thermic Arenic Paleudults

Typical Pedon

Briley loamy fine sand in an area of Briley loamy fine sand, 1 to 8 percent slopes; located in wooded area; NW1/4 NE1/4 NE 1/4 Sec. 36, T. 14 S., R. 21 W.

A—0 to 4 inches; brown (10YR 4/3) loamy fine sand; weak fine granular structure; very friable; many fine roots; slightly acid; clear smooth boundary.

E1—4 to 12 inches; brown (10YR 5/3) loamy fine sand; single grain; very friable; many fine roots; strongly acid; clear smooth boundary.

E2—12 to 21 inches; light yellowish brown (10YR 6/4) loamy fine sand; single grain; very friable; many fine and medium roots; strongly acid; clear smooth boundary.

Bt1—21 to 35 inches; red (2.5YR 4/8) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt2—35 to 80 inches; red (2.5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; firm; 2 percent faint clay films on faces of peds; 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; few pockets of clean sand grains; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture - loamy fine sand
Reaction - slightly acid to strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture - loamy fine sand
Reaction - slightly acid to strongly acid

Bt horizon:
Color - hue of 5 YR or 2.5YR, value of 4 or 5, chroma of 6 to 8
Texture - sandy clay loam, loam, or fine sandy loam

Redoximorphic concentrations - shades of red, brown, or yellow
Reaction - strongly acid or very strongly acid

Darden Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Backslope
Parent Material: Sandy marine deposits
Drainage Class: Excessively drained
Saturated Hydraulic Conductivity Class: Very high
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 35 percent

Associated Soils

Briley
Rosalie
Ruston
Sacul
Smithdale
Warnock

Taxonomic Classification

Thermic, coated Typic Quartzipsamments

Typical Pedon

Darden loamy fine sand in an area of Darden loamy fine sand, 1 to 8 percent slopes; located in a pine plantation; NE1/4 NE 1/4 SW1/4 Sec. 21, T. 12 S., R. 20 W.

A—0 to 6 inches; brown (10YR 4/3) loamy fine sand; weak fine granular structure; very friable; many fine roots; moderately acid; clear smooth boundary.

Bw1—6 to 17 inches; brown (7.5YR 4/4) loamy fine sand; single grain; loose; many fine roots; strongly acid; gradual smooth boundary.

Bw2—17 to 47 inches; strong brown (7.5YR 4/6) loamy fine sand; single grain; loose; few fine roots; strongly acid; gradual smooth boundary.

Bw3—47 to 80 inches; strong brown (7.5YR 5/6) loamy sand; single grain; loose; few pockets of clean sand; very strongly acid.

Range in Characteristics

Solum thickness: greater than 80 inches

A horizon:
Color - hue of 10YR, value of 3 to 5, and chroma of 2 to 4: or hue of 7.5YR, value of 4, and chroma of 4
Texture - loamy fine sand
Reaction - moderately acid or strongly acid

Bw horizon:
Color - hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8

Texture - loamy fine sand, loamy sand, or strata of fine sand or sand
Reaction - strongly acid or very strongly acid

DeAnn Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Footslope
Parent Material: Alkaline clayey marine deposits derived from chalk
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Deep to bedrock, paralithic layer
Shrink-swell Potential: Very high
Slope: 3 to 8 percent

Associated Soils

Japany
Laneburg
Prescott
Una
Urbo

Taxonomic Classification

Very-fine, smectitic, thermic Oxyaquic Hapluderts

Typical Pedon

DeAnn clay in an area of DeAnn clay, 3 to 8 percent slopes; located in a hayfield; NW1/4 NW1/4 NW1/4 Sec. 26, T. 11 S., R. 23 W.

Ap—0 to 6 inches; very dark gray (10YR 3/1) clay; strong medium granular structure; very firm; common fine and medium roots; slightly acid; gradual smooth boundary.

A—6 to 20 inches; very dark grayish brown (10YR 3/2) clay; strong medium angular blocky structure; very firm; few fine roots; 2 percent fine light olive brown (2.5Y 5/6) masses of oxidized iron; slightly acid; gradual smooth boundary.

Bss1—20 to 40 inches; light olive brown (2.5Y 5/6) clay; wedge parting to angular blocky structure; very firm; 2 percent fine and 2 percent medium distinct light gray (10YR 7/1) iron depletions; wedge shaped aggregates that are bordered by intersecting slickensides; few black concretions; few calcium carbonate concretions; calcareous; neutral; gradual wavy boundary.

Bss2—40 to 80 inches; light olive brown (2.5Y 5/6) clay; wedge parting to angular blocky structure; very firm; 2 percent fine and 2 percent medium distinct light gray (10YR 7/1) iron depletions; wedge shaped aggregates that are bordered by intersecting slickensides; few black and brown concretions; few calcium carbonate concretions; calcareous; moderately alkaline.

Range in Characteristics

Depth to bedrock: greater than 72 inches

Ap or A horizon:
Color - hue of 10YR or 2.5Y value of 2 or 3, and chroma of 1 or 2

Texture - clay
Reaction - slightly acid or neutral

Bss or Bssk horizon:
Color - hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 or 3
Texture - clay
Redoximorphic concentrations and depletions - shades of brown
Reaction - slightly acid to slightly alkaline

C horizon, when present:
Color - hue of 2.5Y or 10YR, value of 4 or 5, and chroma of 3 to 6.
Texture - clay
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - slightly alkaline or moderately alkaline

Guyton Series

MLRA: Western Coastal Plain
Geomorphic Setting: On flood plain
Parent Material: Loamy alluvium
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 0 to 2 percent

Associated Soils

Amy
Bibb
Ouachita
Rosalie
Sardis
Smithdale
Smithton
Una
Urbo

Taxonomic Classification

Fine-silty, siliceous, active, thermic Typic Glossaqualfs

Typical Pedon

Guyton silt loam in an area of Guyton silt loam, 0 to 2 percent slopes, frequently flooded; located in a wooded area; NE1/4 NE 1/4 SE1/4 Sec. 35, T. 14 S., R. 22 W.

A—0 to 3 inches; brown (10YR 4/3) silt loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

Eg—3 to 14 inches; gray (10YR 6/1) silt loam; weak medium subangular blocky structure; friable; few fine roots; 10 percent medium distinct dark yellowish brown (10YR 4/4) masses of oxidized iron; very strongly acid; clear irregular boundary.

Btg/Eg—14 to 28 inches; 70 percent gray (10YR 5/1) and 30 percent gray (10YR 6/1) silt loam; moderate medium subangular blocky and weak medium subangular blocky structure; friable; 2 percent faint clay films on faces of peds; 10 percent medium distinct dark yellowish brown (10YR 4/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Btg1—28 to 36 inches; gray (10YR 6/1) silt loam; moderate medium subangular blocky structure; friable; 2 percent faint clay films on faces of peds; 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; 10 percent medium faint light gray (10YR 7/1) clay depletions; very strongly acid; gradual wavy boundary.

Btg2—36 to 63 inches; gray (10YR 5/1) silt loam; moderate medium subangular blocky structure; friable; 2 percent faint clay films on faces of peds; 15 percent medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; 15 percent medium faint gray (10YR 6/1) clay depletions; very strongly acid; abrupt wavy boundary.

Cg—63 to 80 inches; gray (10YR 5/1) silty clay loam; massive; firm; 2 percent medium distinct strong brown (7.5YR 5/6) and 2 percent medium distinct yellowish brown (10YR 5/4) masses of oxidized iron; very strongly acid.

Range in Characteristics

Solum thickness: greater than 50 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - silt loam
Reaction - moderately acid to strongly acid

Eg horizon and Eg part of the Btg/Eg horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 1 or 2
Texture - silt loam, very fine sandy loam, or loam
Redoximorphic concentrations - shades of brown
Reaction - strongly acid or very strongly acid

Btg horizon and Btg part of the Btg/Eg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - silt loam, silty clay loam, or clay loam
Redoximorphic concentrations and depletions - shades of brown and gray
Reaction - strongly acid or very strongly acid

Cg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6 and chroma of 1 or 2
Texture - silt loam, silty clay loam, or sandy clay loam
Redoximorphic concentrations and depletions - shades of brown and gray
Reaction - strongly acid or very strongly acid

Harleston Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Sandy alluvium
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Moderate

Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 8 percent

Associated Soils

Amy
Bibb
Sacul
Sawyer
Smithton
Warnock

Taxonomic Classification

Coarse-loamy, siliceous, semiactive, thermic Aquic Paleudults

Typical Pedon

Harleston fine sandy loam in an area of Harleston fine sandy loam, 1 to 8 percent slopes; located in a wooded area; SW1/4 NW1/4 NE1/4 Sec. 17, T. 13 S., R. 20 W.

A—0 to 7 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak medium granular structure; friable; many fine roots; strongly acid; abrupt smooth boundary.

E—7 to 13 inches; brown (10YR 5/3) fine sandy loam; weak medium granular structure; friable; many fine roots; very strongly acid; clear smooth boundary.

Bt1—13 to 28 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; many fine roots; sand grains coated and bridged with clay; few medium soft red iron masses; very strongly acid; gradual smooth boundary.

Bt2—28 to 43 inches; yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; friable; many fine roots; 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; 10 percent medium distinct gray (10YR 6/1) iron depletions; sand grains coated and bridged with clay; very strongly acid; gradual smooth boundary.

Bt3—43 to 62 inches; strong brown (7.5YR 5/6) loam; moderate medium subangular blocky structure; friable; few fine roots; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 10 percent medium distinct light brownish gray (10YR 6/2) iron depletions; sand grains coated and bridged with clay; few medium soft red iron masses; very strongly acid; gradual wavy boundary.

Bt4—62 to 80 inches; 50 percent gray (10YR 6/1), 30 percent red (2.5YR 5/8), 10 percent yellowish brown (10YR 5/6), and 10 percent strong brown (7.5YR 5/6) stratified sandy clay loam; moderate medium subangular blocky structure; friable; 2 percent patchy faint clay films on faces of peds; sand grains coated and bridged with clay; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:

Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon:

Color - hue of 10YR, value of 5 or 6, and chroma of 2 to 4
Texture - fine sandy loam or loam
Reaction - strongly acid or very strongly acid

Bt1 and Bt2 horizons:

Color - hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture - loam or sandy loam
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - strongly acid or very strongly acid

Bt3 and Bt4 horizons:

Color - hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 4 to 8; or variegated in shades of gray, red, and brown
Texture - loam or sandy clay loam
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - strongly acid or very strongly acid

Japany Series

MLRA: Western Coastal Plain
Geomorphic Setting: On Blackland Prairie interfluve
Parent Material: Cretaceous clayey marine deposits
Drainage Class: Somewhat poorly drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Very deep
Shrink-swell Potential: Very high
Slope: 3 to 8 percent

Associated Soils

DeAnn
Laneburg
Prescott
Wilcox

Taxonomic Classification

Fine, mixed, active, thermic Aquic Dystruderts

Typical Pedon

Japany silt loam in an area of Japany silt loam, 3 to 8 percent slopes; located in a pasture; NE1/4 SW1/4 NW1/4 Sec. 35, T. 10 S., R. 23 W.

A —0 to 3 inches; dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; common fine roots; moderately acid; abrupt smooth boundary.

E—3 to 10 inches; brown (10YR 5/3) silt loam; weak fine granular structure; friable; common fine roots; strongly acid; abrupt smooth boundary.

Bt1—10 to 19 inches; yellowish brown (10YR 5/6) silty clay loam; weak medium subangular blocky structure; friable; few fine roots; patchy faint clay films; 2 percent medium distinct light brownish gray (2.5Y 6/2) iron depletions; 2 percent fine distinct light brownish gray (2.5Y 6/2) iron depletions; very strongly acid; clear wavy boundary.

Bt2—19 to 25 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; patchy faint clay films; 2 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; 2 percent medium distinct pale red (2.5YR 6/2) iron depletions; few fine black concretions; very strongly acid; clear wavy boundary.

Bt3—25 to 43 inches; yellowish brown (10YR 5/6) silty clay; moderate medium subangular blocky structure; firm, very sticky, very plastic; patchy faint clay films; 10 percent medium prominent red (2.5YR 4/6) and 10 percent medium faint brownish yellow (10YR 6/6) masses of oxidized iron; few fine black concretions; very strongly acid; clear smooth boundary.

BCg—43 to 55 inches; gray (10YR 6/1) silty clay; moderate medium subangular blocky structure; firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/6) and 10 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; 2 percent medium distinct light gray (10YR 7/1) clay depletions; few slickensides; few black concretions; few rounded pebbles; very strongly acid; gradual wavy boundary.

Cg—55 to 80 inches; light brownish gray (2.5Y 6/2) clay; massive; firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; few intersecting slickensides; few black concretions; very strongly acid.

Range in Characteristics

Solum thickness: 25 to 55 inches

A horizon:
Color - hue of 10YR, value of 3 or 4, and chroma of 2 or 3
Texture - silt loam
Reaction - moderately acid to strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 2 or 3
Texture - silt loam or fine sandy loam
Reaction - moderately acid to very strongly acid

Bt horizon:
Color - hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 6 to 8
Texture - silty clay loam, clay loam, or silty clay
Redoximorphic concentrations and depletions - shades of red, yellow, brown, and gray
Reaction - strongly acid or very strongly acid

BCg horizon:
Color - hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture - silty clay or clay

Redoximorphic concentrations and depletions - shades of red, yellow, brown, and gray
Reaction - strongly acid or very strongly acid

Cg horizon:
Color - hue of 2.5Y or 10YR; value of 5 to 7, and chroma of 1 or 2
Texture - silty clay or clay
Redoximorphic concentrations - shades of yellow and brown
Reaction - strongly acid or very strongly acid

Laneburg Series

MLRA: Western Coastal Plain
Geomorphic Setting: On Blackland Prairie interfluve
Parent Material: Acid clayey marine deposits over chalk derived from calcareous clayey marine deposits
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Very deep
Shrink-swell Potential: Very high
Slope: 1 to 3 percent

Associated Soils

Adaton
DeAnn
Japany
Prescott
Una

Taxonomic Classification

Fine, smectitic, thermic Typic Epiaquerts

Typical Pedon

Laneburg silty clay loam in an area of Laneburg silty clay loam, 1 to 3 percent slopes; located in a moist soybean field; NW1/4 NW1/4 SE1/4 Sec. 1, T. 11 S., R. 23 W.

Ap—0 to 7 inches; brown (10YR 4/3) silty clay loam; weak medium subangular blocky structure; friable; many fine roots; strongly acid; abrupt smooth boundary.

Btg1—7 to 16 inches; grayish brown (10YR 5/2) silty clay loam; moderate medium subangular blocky structure; firm, moderately sticky; many fine roots; 50 percent continuous distinct clay films on faces of peds; 2 percent medium distinct dark brown (7.5YR 3/4) masses of oxidized iron; few fine black and brown concretions; very strongly acid; gradual wavy boundary.

Btg2—16 to 23 inches; light brownish gray (2.5Y 6/2) silty clay loam; moderate medium subangular blocky structure; firm, moderately sticky; few fine roots; 50 percent continuous distinct clay films; 10 percent medium distinct brownish yellow (10YR 6/8) and 10 percent medium distinct dark brown (7.5YR 3/4) masses of oxidized iron; few brown concretions; very strongly acid; gradual wavy boundary.

Btssg1—23 to 31 inches; gray (10YR 5/1) silty clay; moderate medium angular and subangular blocky structure; very firm, very sticky, very plastic; 50 percent continuous distinct clay films; 10 percent medium distinct brownish yellow (10YR 6/6) and 10 percent medium distinct dark brown (7.5YR 3/4) masses of oxidized iron; few brown and black concretions; few fine soft red iron masses; very strongly acid; gradual wavy boundary.

Btssg2—31 to 44 inches; light brownish gray (2.5Y 6/2) clay; moderate medium subangular blocky and angular blocky structure; very firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/6) and 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; few coarse slickensides that intersect; few black concretions; few rounded quartz pebbles; few fine soft red iron masses; strongly acid; gradual wavy boundary.

C1—44 to 60 inches; gray (10YR 6/1) clay; massive; very firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/8) and 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; few black concretions; few rounded quartz pebbles; few soft red iron masses; moderately acid; gradual wavy boundary.

C2—60 to 80 inches; gray (10YR 5/1) clay; massive; very firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/8) and 10 percent medium distinct olive yellow (2.5Y 6/8) masses of oxidized iron; few black concretions; few medium calcium carbonate concretions; few rounded quartz pebbles; neutral.

Range in Characteristics

Solum thickness: greater than 30 inches

A horizon:
Color - hue of 10YR, value of 3 to 5, and chroma of 2 or 3
Texture - silty clay loam
Reaction - strongly acid or very strongly acid

Btg horizon:
Color - hue 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Texture - silty clay, clay or silty clay loam
Redoximorphic concentrations - shades of brown and yellow
Reaction - strongly acid or very strongly acid

BC and C horizons:
Color - hue of 10YR or 2.5Y, value of 5 or 6 and chroma of 1 or 2
Texture - silty clay or clay
Redoximorphic concentrations - shades of brown and yellow
Reaction - moderately acid to neutral

Ouachita Series

MLRA: Western Coastal Plain
Geomorphic Setting: On flood plain
Parent Material: Loamy alluvium
Drainage Class: Well drained

Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 0 to 1 percent

Associated Soils

Guyton
Sardis
Una
Urbo

Taxonomic Classification

Fine-silty, siliceous, active, thermic Fluventic Dystrudepts

Typical Pedon

Ouachita silt loam in an area of Ouachita silt loam, 0 to 1 percent slopes, frequently flooded; located in a hardwood flood plain; SE 1/4 NW 1/4 NE 1/4 Sec. 6, T. 11 S., R. 20 S.

A—0 to 4 inches; dark grayish brown (10YR 4/2) silt loam; weak medium granular structure; friable; many fine roots; few black concretions; strongly acid; clear smooth boundary.

Bw1—4 to 16 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; friable; many fine roots; common fine pores; few fine black concretions; very strongly acid; abrupt smooth boundary.

Bw2—16 to 27 inches; yellowish brown (10YR 5/4) silt loam; weak medium subangular blocky structure; friable; few fine roots; common fine pores; 2 percent fine distinct pale brown (10YR 6/3) masses of oxidized iron; few black concretions; very strongly acid; gradual smooth boundary.

Bw3—27 to 42 inches; dark yellowish brown (10YR 4/4) silt loam; weak medium subangular blocky structure; friable; common fine pores; 2 percent fine distinct pale brown (10YR 6/3) masses of oxidized iron; few black concretions; very strongly acid; gradual smooth boundary.

2C—42 to 80 inches; dark yellowish brown (10YR 4/6) very fine sandy loam; massive; friable; few fine pores; 10 percent medium faint yellowish brown (10YR 5/6) masses of oxidized iron; 10 percent medium distinct light brownish gray (10YR 6/2) iron depletions; few fine black concretions; very strongly acid.

Range in Characteristics

Solum thickness: greater than 40 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture - silt loam
Reaction - moderately acid or strongly acid

Bw horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 4 to 8
Texture - silt loam or loam

Redoximorphic concentrations and depletions - shades of brown and gray
Reaction - strongly acid or very strongly acid

C horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 4 to 8
Texture - silt loam or very fine sandy loam
Redoximorphic concentrations and depletions - shades of brown and gray
Reaction - strongly acid or very strongly acid

Pikeville Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Gravelly loamy marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 8 percent

Associated Soils

Adaton
Prescott
Saffell
Smithdale
Warnock
Wilcox

Taxonomic Classification

Fine-loamy, siliceous, subactive, thermic Typic Paleudults

Typical Pedon

Pikeville fine sandy loam in an area of Pikeville fine sandy loam, 1 to 8 percent slopes; located in a pit; NE 1/4 NE 1/4 NE 1/4 Sec. 6, T. 11 S., R. 21 W.

A—0 to 5 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; about 3 percent by volume rounded gravel 1/2 to 2 inches in diameter; strongly acid; clear smooth boundary.

BA —5 to 11 inches; yellowish red (5YR 4/6) loam; weak fine subangular blocky structure; friable; few fine roots; few fine pores; about 3 percent by volume rounded gravel 1/2 to 2 inches in diameter; very strongly acid; clear smooth boundary.

Bt1—11 to 25 inches; red (2.5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 2 percent patchy faint clay films on faces of peds; about 4 percent by volume rounded gravel up to 3 inches in diameter; very strongly acid; gradual wavy boundary.

Bt2—25 to 32 inches; red (2.5YR 4/6) gravelly sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 2 percent faint clay films on faces of peds; about 20 percent by volume rounded gravel up to 3 inches in diameter; very strongly acid; gradual wavy boundary.

Bt3—32 to 38 inches; red (2.5YR 4/6) extremely gravelly sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; 2 percent faint clay films on faces of peds; 10 percent medium distinct dark reddish brown (2.5YR 3/4) and 10 percent medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; about 60 percent by volume rounded gravel up to 3 inches in diameter; very strongly acid; gradual wavy boundary.

Bt4—38 to 80 inches; red (2.5YR 4/8) extremely gravelly sandy clay loam; massive; friable; few fine pores; 2 percent faint clay films on faces of peds; 10 percent medium distinct dark reddish brown (2.5YR 3/4) and 10 percent medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; about 80 percent by volume of rounded gravel up to 3 inches in diameter; very strongly acid.

Range in Characteristics

Solum thickness: greater than 72 inches

A horizon:
Color - hue of 10YR, value of 3 or 4, and chroma of 2 to 4
Texture - fine sandy loam
Reaction - slightly acid to strongly acid
Percent coarse fragments - 0 to 15

BA horizon:
Color - hue of 10YR to 5YR, value of 4 or 5, and chroma of 4 to 8
Texture - fine sandy loam or loam
Reaction - strongly acid or very strongly acid
Percent coarse fragments - 0 to 15

Bt1 and Bt2 horizons:
Color - hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8
Texture - sandy clay loam, clay loam, loam, gravelly sandy clay loam, gravelly clay loam, or gravelly loam.
Reaction - strongly acid or very strongly acid
Redoximorphic concentrations and depletions - shades of brown or red
Percent coarse fragments - 0 to 25

Bt3 and Bt4 horizons:
Color - hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8
Texture - very gravelly and extremely gravelly analogs of sandy clay loam, clay loam, and loam
Reaction - strongly acid or very strongly acid
Redoximorphic concentrations and depletions - shades of brown or red
Percent coarse fragment - 35 to 80

Prescott Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Loamy marine deposits
Drainage Class: Somewhat poorly drained
Saturated Hydraulic Conductivity Class: Low
Soil Depth Class: Very deep
Shrink-swell Potential: High
Slope: 1 to 6 percent

Associated Soils

Adaton
DeAnn
Japany
Laneburg
Pikeville
Sawyer
Wilcox

Taxonomic Classification

Fine-silty, mixed, active, thermic Oxyaquic Hapludalfs

Typical Pedon

Prescott silt loam in an area of Prescott silt loam, 1 to 6 percent slopes; located in a hay meadow; NW1/4 NW1/4 NE1/4 Sec. 19, T. 11 S., R. 22 W. (fig 5)

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam; moderate medium and fine subangular blocky structure; friable; many fine and medium roots; many fine and medium pores; 25 percent medium brown (10YR 4/3) and 25 percent medium black (10YR 2/1) iron-manganese concretions; about 2 percent quartz gravel up to 1/2 inch in diameter; strongly acid; clear smooth boundary.

Bt1—6 to 15 inches; strong brown (7.5YR 5/6) silt loam; moderate medium subangular blocky structure; friable; common fine and medium roots; common fine and few coarse pores; 2 percent faint clay films on faces of peds; some pores lined with yellowish brown (10YR 5/6) clay films; 2 percent medium brown (7.5YR 4/4) masses of oxidized iron; few fine and medium iron-manganese concretions with black exterior and brown interior; about 2 percent quartz gravel up to 1/2 inch in diameter; strongly acid; clear smooth boundary.

Bt2—15 to 21 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; friable; common fine and medium pores; 2 percent faint clay films on faces of peds; 2 percent fine brown (10YR 5/3) masses of oxidized iron; few fine iron manganese concretions with black exterior and brown interior; about 2 percent quartz gravel up to 1/2 inch in diameter; very strongly acid; gradual wavy boundary.

Bt3—21 to 35 inches; yellowish brown (10YR 5/4) silt loam; weak coarse subangular blocky structure; friable; few fine roots; common fine and few coarse pores; 2 percent faint clay films on faces of peds; 10 percent distinct strong brown (7.5YR 5/6) masses of oxidized iron; 10 percent faint grayish brown (10YR 5/2) clay depletions; many prominent black accumulations; about 5 percent subrounded quartz gravel up to 1 inch in diameter; very strongly acid; clear smooth boundary.

Btg1—35 to 65 inches; light gray (10YR 7/1) silt loam; moderate medium subangular blocky structure; firm; few fine roots; few fine pores; 50 percent distinct clay films on faces of peds; 25 percent medium yellowish brown (10YR 5/6) and 25 percent medium yellowish brown (10YR 5/4) masses of oxidized iron; many black manganese accumulation; about 25 percent of peds brittle; very coarse concretions with black exterior and brown interior; about 12 percent subrounded quartz gravel up to 1 inch in diameter; very strongly acid; clear smooth boundary.

2Btg2—65 to 80 inches; light brownish gray (2.5Y 6/2) gravelly silty clay; moderate medium and fine angular blocky structure; firm; few fine pores; 50 percent continuous prominent clay films; 25 percent coarse yellowish brown (10YR 5/6), 2 percent fine strong brown (7.5YR 5/6), and 2 percent fine yellowish brown

Figure 5. Profile of Prescott silt loam.

(10YR 5/4) masses of oxidized iron; 2 percent fine grayish brown (10YR 5/2) clay depletions; few medium iron manganese concretions with black exteriors and brown interiors; about 25 percent rounded polished quartz gravel about 1 to 3 inches in diameter with an occasional 5 inch cobble; extremely acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR or 7.5YR, value of 3 or 4, and chroma of 2 to 4
Texture - silt loam
Reaction - moderately acid or strongly acid
Percent coarse fragments - 0 to 5

Bt horizon:
Color - hue of 10YR or 7.5YR; value of 4 or 5, and chroma of 4 to 6
Texture - silt loam or silty clay loam
Redoximorphic concentrations and depletions - shades of brown, red, and gray
Reaction - strongly acid to very strongly acid
Percent coarse fragments – 0 to 5

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2
Texture - silt loam, silty clay loam, gravelly silt loam, or gravelly silty clay loam
Redoximorphic concentrations and depletions - shades of brown, red, and gray
Reaction - very strongly acid or extremely acid
Percent coarse fragments - 5 to 35

2Btg horizon:
Color - hue of 2.5Yor 10YR, value of 6 or 7, and chroma of 1 or 2
Texture - gravelly silty clay or gravelly clay
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - very strongly acid or extremely acid.
Percent coarse fragments - 15 to 35

2BCg horizon:
Color - hue of 2.5Yor 10YR, value of 6 or 7, and chroma of 1 or 2
Texture - gravelly silty clay or gravelly clay
Redoximorphic concentrations and depletions - shades of brown or gray
Reaction - very strongly acid or extremely acid.
Percent coarse fragments - 15 to 35

3Cg horizon: (where present)
Texture - soft, platy gray, yellow or brown shale clay

Rosalie Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Sandy marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate

Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 8 percent

Associated Soils

Angie
Bowie
Briley
Darden
Guyton
Ruston
Sacul
Smithdale
Smithton
Warnock

Taxonomic Classification

Loamy, siliceous, active, thermic Arenic Paleudults

Typical Pedon

Rosalie loamy fine sand in an area of Rosalie loamy fine sand, 1 to 8 percent slopes; located in a wooded area; NW1/4 SW1/4 SE1/4 Sec. 26, T. 13 S., R. 22 W.

A—0 to 8 inches; brown (10YR 5/3) loamy fine sand; weak fine granular structure; loose; common fine and medium roots; strongly acid; clear smooth boundary.

E1—8 to 23 inches; light yellowish brown (10YR 6/4) loamy fine sand; single grain; loose; common fine roots and common medium roots; very strongly acid; clear smooth boundary.

E2—23 to 36 inches; very pale brown (10YR 7/3) loamy fine sand; single grain; loose; few fine and medium roots; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

Bt/E—36 to 48 inches; 85 percent yellowish brown (10YR 5/6) and 15 percent very pale brown (10YR 7/3) sandy clay loam; massive and weak medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 2 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Bt—48 to 68 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 10 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; 10 percent medium prominent light gray (10YR 7/1) clay depletions; 2 percent plinthite nodules; very strongly acid; gradual wavy boundary.

BC—68 to 80 inches; 40 percent red (2.5YR 4/6), 40 percent light gray (10YR 7/1), and 20 percent brownish yellow (10YR 6/8) sandy clay loam; weak fine subangular blocky structure; friable; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 3 or 4
Texture - loamy fine sand
Reaction - strongly acid to moderately acid

E horizon and E part of the Bt/E horizon:
Color - hue of 10YR, value of 5 to 7, and chroma of 3 or 4
Texture - loamy fine sand or loamy sand
Reaction - strongly acid or very strongly acid

Bt horizon and B part of Bt/E horizon:
Color - hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 8
Texture - loam, sandy clay loam, or clay loam
Redoximorphic concentrations and depletions - shades of gray, red, or brown
Reaction - strongly acid or very strongly acid

BC horizon:
Color - variegated shades of red, brown, and gray
Texture - loam, sandy clay loam, or clay loam
Redoximorphic concentrations and depletions - shades of yellow, brown, red, or gray
Reaction - strongly acid or very strongly acid

Ruston Series

MLRA: Western Coastal Plain
Geomorphic Setting: On Coastal Plain interfluve
Parent Material: Loamy marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 3 percent

Associated Soils

Briley
Darden
Rosalie
Smithdale
Warnock

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Paleudults

Typical Pedon

Ruston fine sandy loam in an area of Ruston fine sandy loam, 1 to 3 percent slopes; located in a hayfield; SE1/4 NE1/4 SE1/4 Sec. 23, T. 13 S., R. 20 W.

A—0 to 8 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; friable; common fine and medium roots; moderately acid; abrupt smooth boundary.

BA—8 to 13 inches; red (2.5YR 4/6) fine sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; moderately acid; abrupt smooth boundary.

Bt1—13 to 20 inches; reddish brown (2.5YR 4/4) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; 10 percent continuous distinct clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt2—20 to 42 inches; red (2.5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 10 percent patchy faint clay films on faces of peds; strongly acid; gradual wavy boundary.

Bt/E—42 to 66 inches; 80 percent reddish brown (2.5YR 4/4) and 20 percent yellowish brown (10YR 5/4) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; 2 percent faint clay films on faces of peds; very strongly acid; gradual wavy boundary.

B't—66 to 80 inches; red (2.5YR 4/6) loam; weak medium subangular blocky structure; friable; 2 percent faint clay films on faces of peds; slightly brittle; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon and E part of the Bt/E horizon:
Color - hue of 10YR, value of 5 or 6, chroma of 3 or 4
Texture - fine sandy loam or loamy fine sand
Reaction - moderately acid or strongly acid

BA horizon:
Color - hue of 2.5YR to 5YR, value of 4 or 5, and chroma of 4 to 6
Texture - fine sandy loam or loam
Reaction - moderately acid or strongly acid

Bt, B’t horizons and B part of the Bt/E horizon:
Color - hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 4 to 8
Texture - sandy clay loam, loam, fine sandy loam, or clay loam
Redoximorphic concentrations and depletions - shades of brown, yellow, or gray
Reaction - strongly acid or very strongly acid

Sacul Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Backslope
Parent Material: Clayey marine deposits
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Low

Soil Depth Class: Very deep
Shrink-swell Potential: High
Slope: 1 to 35 percent

Associated Soils

Angie
Bibb
Bowie
Briley
Darden
Harleston
Rosalie
Sawyer
Smithdale
Smithton
Warnock

Taxonomic Classification

Fine, mixed, active, thermic Aquic Hapludults

Typical Pedon

Sacul fine sandy loam in an area of Sacul fine sandy loam, 3 to 8 percent slopes; located in a wooded area; NE1/4 SW1/4 SW 1/4 Sec. 24, T. 14 S., R. 20 W.

A—0 to 3 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; friable; common fine roots; strongly acid; abrupt smooth boundary.

E—3 to 7 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; friable; common fine roots; very strongly acid; clear smooth boundary.

Bt1—7 to 15 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure; very firm, moderately plastic; common fine roots; 25 percent distinct clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—15 to 24 inches; red (2.5YR 5/6) clay; moderate medium subangular blocky structure; very firm, moderately plastic; few fine roots; 25 percent distinct clay films on faces of peds; 10 percent medium distinct red (10R 4/8) masses of oxidized iron; 10 percent medium prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear smooth boundary.

Btg1—24 to 57 inches; light brownish gray (10YR 6/2) silty clay loam; weak medium subangular blocky structure; firm; few fine roots; 2 percent faint clay films on faces of peds; 10 percent medium prominent red (10R 4/8) and 10 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

Btg2—57 to 67 inches; light brownish gray (10YR 6/2) clay loam; weak medium subangular blocky and weak medium platy structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 10 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

BCg—67 to 73 inches; light brownish gray (10YR 6/2) silty clay loam; weak medium platy and angular blocky structure; friable; 10 percent medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; clear smooth boundary.

Cg—73 to 80 inches; light brownish gray (2.5Y 6/2) silt loam; massive; friable; 10 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Solum thickness: greater than 50 inches

A horizon:
Color - hue of 10YR, value of 3 or 4, and chroma of 2 to 4
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture - fine sandy loam or loam
Reaction - moderately acid to very strongly acid

Bt horizon:
Color - hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
Texture - silty clay, sandy clay, or clay
Redoximorphic concentrations and depletions - shades of red, gray, and brown
Reaction - strongly acid or very strongly acid

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - silty clay loam, clay loam, or sandy clay loam
Redoximorphic concentrations and depletions - shades of red, brown, yellow, and gray
Reaction - strongly acid or very strongly acid

BCg and Cg horizons:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - sandy clay loam, silty clay loam, clay loam, fine sandy loam, or silt loam
Redoximorphic concentrations and depletions - shades of red, brown, yellow, or gray
Reaction - strongly acid or very strongly acid

Saffell Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Backslope
Parent Material: Loamy and gravelly marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 3 to 15 percent

Associated Soils

Pikeville
Smithton
Wilcox

Taxonomic Classification

Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Typical Pedon

Saffell gravelly fine sandy loam in an area of Saffell gravelly fine sandy loam, 3 to 8 percent slopes; located in a gravel pit; NW 1/4 SE 1/4 SW 1/4 Sec. 13, T. 11 S., R. 21 W.

A—0 to 9 inches; brown (7.5YR 4/4) gravelly fine sandy loam; weak fine granular structure; friable; many fine roots and many medium roots; about 18 percent by volume quartz gravel rounded and subrounded, less than 2 inches in diameter; strongly acid; clear smooth boundary.

BE—9 to 17 inches; dark yellowish brown (10YR 4/4) gravelly sandy loam; weak fine granular structure; friable; many fine and medium roots; about 25 percent by volume quartz gravel rounded and subrounded less than 2 inches in diameter; strongly acid; clear smooth boundary.

Bt1—17 to 28 inches; yellowish red (5YR 5/6) very gravelly loam; weak medium subangular blocky structure; friable; few fine and medium roots; 2 percent faint clay films on faces of peds; sand grains coated with clay about 45 percent by volume quartz gravel rounded and subrounded, about 3 inches in diameter; very strongly acid; gradual smooth boundary.

Bt2—28 to 53 inches; red (2.5YR 4/6) extremely gravelly clay loam; moderate medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; sand grains coated with clay about 70 percent by volume quartz gravel rounded and subrounded, about three inches in diameter; very strongly acid; gradual wavy boundary.

C—53 to 80 inches; reddish brown (2.5YR 4/4) extremely gravelly sandy loam; structureless, single grain; friable; 2 percent medium distinct yellowish brown (10YR 5/4) masses of oxidized iron; about 80 percent by volume quartz gravel rounded and subrounded, about 4 inches in diameter; very strongly acid.

Range in Characteristics

Solum thickness: 35 to 60 inches

A horizon:
Color - hue of 10YR or 7.5YR, value of 4 or 5, and chroma of 2 to 4
Texture - gravelly fine sandy loam or loam
Reaction - moderately acid or strongly acid
Percent coarse fragments - 15 to 35

BE horizon:
Color - hue of 10YR or 7.5YR, value of 4 or 5, and chroma of 3 to 5
Texture - gravelly fine sandy loam, gravelly sandy loam, or gravelly loam
Reaction - strongly acid or very strongly acid
Percent coarse fragments - 15 to 35

Bt horizon:
Color - hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8
Texture - very gravelly analogs of sandy clay loam, loam, and clay loam
Reaction- strongly acid or very strongly acid
Percent coarse fragments - 35 to 80

C horizon:
Color - hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 4 to 8
Texture - extremely gravelly loam or extremely gravelly sandy loam
Redoximorphic concentrations and depletions - shades of yellow, brown, or red
Reaction - strongly acid to very strongly acid
Percent coarse fragments - 60 to 80

Sardis Series

MLRA: Western Coastal Plain
Geomorphic Setting: On flood plain
Parent Material: Loamy alluvium
Drainage Class: Somewhat poorly drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 0 to 2 percent

Associated Soils

Guyton
Ouachita
Una

Taxonomic Classification

Fine-silty, siliceous, active, thermic Fluvaquentic Dystrudepts

Typical Pedon

Sardis silt loam in an area of Sardis silt loam, 0 to 2 percent slopes, frequently flooded; located in a wooded area; NW 1/4 NW 1/4 NE 1/4 Sec. 22, T. 9 S., R. 23 W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; few fine and medium roots; few fine pores; 2 percent iron-manganese concretions; strongly acid; clear smooth boundary.

Bw1—6 to 13 inches; brown (10YR 4/3) silt loam; weak fine subangular blocky structure; friable; few fine and medium roots; few fine pores; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 10 percent medium distinct grayish brown (10YR 5/2) iron depletions; 2 percent fine iron-manganese concretions; strongly acid; clear smooth boundary.

Bw2—13 to 24 inches; brown (10YR 5/3) silt loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; 10 percent medium distinct gray (10YR 6/1) iron depletions; 2 percent iron-manganese concretions; strongly acid; gradual smooth boundary.

Bw3—24 to 36 inches; yellowish brown (10YR 5/6) silt loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; 10 percent medium distinct dark yellowish brown (10YR 4/4) masses of oxidized iron; 10 percent medium distinct light brownish gray (10YR 6/2) iron depletions; 2 percent iron-manganese concretions; very strongly acid; gradual smooth boundary.

Bw4—36 to 60 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure; firm; few fine roots; few fine pores; 25 percent medium distinct gray (10YR 6/1) iron depletions; 2 percent iron-manganese concretions; very strongly acid; gradual smooth boundary.

Cg—60 to 80 inches; light brownish gray (10YR 6/2) silt loam; massive; firm; few fine pores; 10 percent medium distinct yellowish brown (10YR 5/6) and 10 percent medium prominent yellowish red (5YR 4/6) masses of oxidized iron; 2 percent iron-manganese concretions; very strongly acid.

Range in Characteristics

Solum thickness: 40 to 70 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture - silt loam
Reaction - slightly acid to strongly acid

Bw horizon:
Color - hue of 10YR or 7.5YR, value of 4 to 6, and chroma of 3 to 8
Texture - silt loam, silty clay loam, or clay loam
Redoximorphic concentrations and depletions - shades of brown and gray
Reaction - strongly acid to very strongly acid

Cg horizon:
Color - hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture - silt loam, silty clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of brown, red, or gray
Reaction - strongly acid to very strongly acid

Savannah Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Footslope
Parent Material: Loamy marine deposits
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Moderately deep to a fragipan layer
Shrink-swell Potential: Low
Slope: 1 to 8 percent

Associated Soils

Bowie
Warnock

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults

Typical Pedon

Savannah fine sandy loam in an area of Savannah fine sandy loam, 1 to 3 percent slopes; located in a wooded area; SW1/4 NW1/4 SW1/4 Sec. 3, T. 13 S., R. 23 W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; friable; few fine roots; few fine black concretions; strongly acid; clear smooth boundary.

E—6 to 12 inches; pale brown (10YR 6/3) fine sandy loam; weak fine granular structure; friable; few fine roots; few black and brown concretions; strongly acid; clear smooth boundary.

Bt1—12 to 22 inches; yellowish brown (10YR 5/6) loam; weak medium subangular blocky structure; friable; few fine roots; patchy faint clay films on faces of peds; few black and brown concretions; very strongly acid; clear smooth boundary.

Bt2—22 to 28 inches; yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; friable; few fine roots; patchy faint clay films on faces of peds; 10 percent fine pale brown (10YR 6/3) iron depletions; few black concretions; very strongly acid; clear smooth boundary.

Btx1—28 to 35 inches; 60 percent yellowish brown (10YR 5/4) and 40 percent light brownish gray (10YR 6/2) loam; moderate coarse subangular blocky, weak coarse prismatic, moderate medium angular and subangular blocky, and moderate coarse angular blocky structure; firm; 2 percent patchy clay films on faces of peds; gray (10YR 6/1) clay depletions; few fine roots in seams between prisms; sand grains coated with clay; compact and brittle in about 70 percent of mass; common fine brown concretions; very strongly acid; gradual smooth boundary.

Btx2—35 to 44 inches; 50 percent yellowish brown (10YR 5/6), 30 percent gray (10YR 5/1), and 20 percent yellowish red (5YR 5/8) sandy clay loam; moderate medium angular and subangular blocky, weak coarse prismatic, and moderate coarse angular and subangular blocky structure; firm; clay films on faces of peds; compact and brittle in about 60 percent of mass; seams of gray (10YR 6/1) clay depletions; very strongly acid; gradual smooth boundary.

Btx3—44 to 56 inches; 50 percent yellowish brown (10YR 5/6), 30 percent gray (10YR 5/1), and 20 percent yellowish red (5YR 5/8) clay loam; moderate medium subangular blocky, weak coarse prismatic, moderate coarse and medium angular blocky, and moderate coarse subangular blocky structure; firm; clay films on faces of peds; compact and brittle in about 60 percent of mass; seams of gray (10YR 6/1) clay depletions; very strongly acid; gradual smooth boundary.

Btx4—56 to 80 inches; 50 percent yellowish red (5YR 5/8), 30 percent gray (10YR 6/1), and 20 percent yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky, weak course prismatic, moderate coarse angular blocky, moderate medium angular blocky, and moderate coarse subangular blocky structure; firm; clay films on faces of peds; compact and brittle in about 60 percent of mass; seams of gray (10YR 6/1) clay depletions; very strongly acid.

Range in Characteristics

Solum thickness: greater than 50 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - fine sandy loam
Reaction - strongly acid or very strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture - silt loam, loam, fine sandy loam, or sandy loam
Reaction - strongly acid or very strongly acid

Bt horizon:
Color - hue of 7.5YR or 10YR, value of 5, and chroma of 4 to 8
Texture - sandy clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of brown
Reaction - strongly acid or very strongly acid

Btx horizon:
Color - hue of 10YR, value of 5, and chroma of 4 to 8; or variegated shades of brown, red, and gray
Texture - sandy clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of gray or brown
Reaction - strongly acid or very strongly acid

Sawyer Series

MLRA: Western Coastal Plain
Geomorphic Setting: On Coastal Plain interfluve
Parent Material: Loamy and clayey marine deposits
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Low
Soil Depth Class: Very deep
Shrink-swell Potential: High
Slope: 1 to 8 percent

Associated Soils

Angie
Harleston
Prescott
Sacul
Smithdale
Warnock
Wilcox

Taxonomic Classification

Fine-silty, siliceous, semiactive, thermic Aquic Paleudults

Typical Pedon

Sawyer very fine sandy loam in an area of Sawyer very fine sandy loam, 1 to 3 percent slopes; located in a wooded area; NE1/4 SE1/4 NE1/4 Sec. 30, T. 14 S., R. 20 W.

A—0 to 7 inches; dark grayish brown (10YR 4/2) very fine sandy loam; weak fine granular structure; friable; many fine and medium roots; strongly acid; abrupt smooth boundary.

E—7 to 14 inches; light yellowish brown (10YR 6/4) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; few black concretions; strongly acid; gradual smooth boundary.

Bt1—14 to 22 inches; yellowish brown (10YR 5/8) silt loam; weak medium subangular blocky structure; friable; few fine roots; 2 percent faint clay films on faces of peds; 2 percent medium and 2 percent fine faint yellowish brown (10YR 5/6) masses of oxidized iron; few black concretions; very strongly acid; gradual smooth boundary.

Bt2—22 to 38 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure; firm; few fine roots; 5 percent faint clay films on faces of peds; 10 percent medium distinct strong brown (7.5YR 5/6) and 10 percent medium distinct yellowish red (5YR 5/8) masses of oxidized iron; few red iron manganese concretions; very strongly acid; clear smooth boundary.

Bt3—38 to 50 inches; red (2.5YR 4/6) silty clay loam; moderate medium subangular blocky structure; firm; few fine roots; 2 percent distinct clay films on faces of peds; 10 percent medium prominent yellowish red (5YR 5/8) and 10 percent medium distinct reddish yellow (7.5YR 6/8) masses of oxidized iron; 2 percent medium distinct gray (10YR 6/1) iron depletions; 2 percent medium prominent gray (10YR 6/1) clay depletions; few red iron manganese concretions; very strongly acid; clear smooth boundary.

Btg1—50 to 60 inches; gray (10YR 6/1) silty clay; moderate medium subangular blocky structure; firm; 2 percent distinct clay films on faces of peds; 10 percent medium distinct yellow (10YR 7/8) and 10 percent medium distinct strong brown (7.5YR 4/6) masses of oxidized iron; few red iron manganese concretions; very strongly acid; clear smooth boundary.

BCg—60 to 80 inches; gray (10YR 6/1) silty clay; massive; firm; 10 percent medium distinct brownish yellow (10YR 6/8) and 10 percent medium distinct red (2.5YR 4/8) masses of oxidized iron; few dark red iron manganese concretions; extremely acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - very fine sandy loam
Reaction - strongly acid or very strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture - fine sandy loam, loam, or silt loam
Reaction - strongly acid or very strongly acid

Bt horizon:
Color - hue of 10YR, 7.5YR or 2.5YR, value of 4 or 5, and chroma of 4 to 8
Texture - silt loam, silty clay loam, or loam
Redoximorphic concentrations and depletions - shades of brown, red, yellow, and gray
Reaction - very strongly acid or extremely acid

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - silty clay, silty clay loam, or clay
Redoximorphic concentrations and depletions - shades of brown, yellow, red, and gray
Reaction - very strongly acid or extremely acid

BCg horizon:
Color - hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Texture - silty clay or clay
Redoximorphic concentrations and depletions - shades of red, yellow, brown, and gray
Reaction - very strongly acid or extremely acid

Smithdale Series

MLRA: Western Coastal Plain
Geomorphic Setting: On Coastal Plain interfluve
Position on Hillslope: Backslope
Parent Material: Loamy marine deposits
Drainage Class: Well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 3 to 35 percent

Associated Soils

Bowie
Briley
Darden
Guyton
Pikeville
Rosalie
Ruston
Sacul
Sawyer
Warnock

Taxonomic Classification

Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Typical Pedon

Smithdale fine sandy loam in an area of Smithdale fine sandy loam, 3 to 8 percent slopes; located in a wooded area; NW1/4 SW1/4 SW 1/4 Sec. 19, T. 12 S., R. 21 W.

A—0 to 5 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

E—5 to 11 inches; light yellowish brown (10YR 6/4) fine sandy loam; weak fine granular structure; friable; many fine roots; strongly acid; clear smooth boundary.

Bt1—11 to 30 inches; red (2.5YR 4/8) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; 10 percent faint clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—30 to 50 inches; red (2.5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; sand grains bridged and coated with clay; few pockets of brownish yellow (10YR 6/3) coated sand grains; very strongly acid; clear wavy boundary.

Bt3—50 to 80 inches; red (2.5YR 4/8) sandy loam; weak medium subangular blocky structure; friable; sand grains bridged and coated with clay; few pockets of yellowish brown (10YR 5/8) coated sand grains; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - fine sandy loam
Reaction - moderately acid or strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture - fine sandy loam, sandy loam, or loam
Reaction - strongly acid or very strongly acid

Bt1 and Bt2 horizons:
Color - hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 or 8
Texture - sandy clay loam, clay loam, or loam.
Reaction - strongly acid or very strongly acid

Bt3 horizon:
Color - hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
Texture - loam or sandy loam
Reaction - strongly acid or very strongly acid

Smithton Series

MLRA: Western Coastal Plain
Geomorphic Setting: On nearly level stream terrace
Position on terrace: Tread
Parent Material: Loamy marine deposits
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Moderate
Slope: 0 to 2 percent

Associated Soils

Amy
Bibb
Guyton
Harleston
Saffell
Una
Urbo

Taxonomic Classification

Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults

Typical Pedon

Smithton fine sandy loam in an area of Smithton fine sandy loam, 0 to 2 percent slopes; located in a wooded area; SW1/4 NW1/4 NE1/4 Sec. 25, T. 11 S., R. 20 W.

A—0 to 4 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; strongly acid; abrupt smooth boundary.

Eg—4 to 9 inches; light brownish gray (10YR 6/2) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; 2 percent fine faint yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid; clear wavy boundary.

Btg1—9 to 23 inches; light brownish gray (10YR 6/2) fine sandy loam; weak medium subangular blocky structure; friable; many fine and medium roots; 10 percent medium distinct yellowish brown (10YR 5/4) and 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; sand grains coated and bridged with clay; few brown concretions; very strongly acid; gradual smooth boundary.

Btg2—23 to 37 inches; light brownish gray (10YR 6/2) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; 10 percent medium distinct yellowish brown (10YR 5/8) and 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; sand grains coated and bridged with clay; few brown concretions; very strongly acid; gradual smooth boundary.

Btg3—37 to 55 inches; gray (10YR 5/1) loam; moderate medium subangular blocky structure; friable; 10 percent medium distinct dark yellowish brown (10YR 4/6) and 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; sand grains coated and bridged with clay; few pockets of gray (10YR 6/1) iron depletions; coated sand grains; few brown concretions; very strongly acid; gradual smooth boundary.

Btg4—55 to 80 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; friable; common fine roots throughout; 5 percent faint clay films on faces of peds; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron with clear boundaries; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; sand grains coated and bridged with clay; few pockets of gray (10YR 6/1) clay depletions coated with silt loam; few brown concretions; extremely acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 3 to 5, and chroma of 1 or 2
Texture - fine sandy loam or loam
Reaction - moderately acid or strongly acid

Eg horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 1 or 2
Texture - fine sandy loam or loam
Redoximorphic concentrations and depletions - shades of brown
Reaction - strongly acid or very strongly acid

Btg horizon:
Color - hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture - fine sandy loam, very fine sandy loam, loam, silty clay loam, sandy clay loam, or silt loam
Redoximorphic concentrations and depletions - shades of brown, yellow, and gray
Reaction - strongly acid or very strongly acid

Una Series

MLRA: Western Coastal Plain
Geomorphic Setting: On flood plain
Parent Material: Acid clayey alluvium
Drainage Class: Poorly drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Very deep
Shrink-swell Potential: High
Slope: 0 to 1 percent

Associated Soils

Amy
DeAnn
Guyton
Laneburg
Ouachita
Sardis
Smithton
Urbo
Wilcox

Taxonomic Classification

Fine, mixed, active, acid, thermic Typic Epiaquepts

Typical Pedon

Una silty clay loam in an area of; Una silty clay loam 0 to 1 percent slopes, frequently flooded, located in a soybean field; NW1/4 NW ¼ SW1/4 Sec. 6, T. 11 S., R. 20 W.

Ap—0 to 5 inches; very dark grayish brown (10YR 3/2) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; slightly acid; abrupt smooth boundary.

Bgc1—5 to 13 inches; gray (10YR 6/1) clay; moderate medium subangular blocky structure; firm, very sticky, very plastic; few fine roots; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; few black iron manganese concretions; strongly acid; gradual wavy boundary.

Bgc2—13 to 25 inches; gray (10YR 5/1) clay; moderate medium subangular blocky structure; firm, very sticky, very plastic; few fine roots; 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; few slickensides that do not intersect; many black iron manganese concretions; very strongly acid; gradual wavy boundary.

Bgc3—25 to 54 inches; gray (10YR 6/1) silty clay; moderate fine angular blocky structure; firm, very sticky, very plastic; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; few slickensides that do not intersect; many black iron manganese concretions; very strongly acid; gradual wavy boundary.

Bgc4—54 to 64 inches; light gray (10YR 7/1) silty clay; moderate fine angular blocky structure; firm, very sticky, very plastic; 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; few slickensides that do not intersect; few black iron manganese concretions; very strongly acid; gradual wavy boundary.

Bgc5—64 to 80 inches; light brownish gray (10YR 6/2) silty clay loam; weak medium angular blocky structure; firm, very sticky, very plastic; 2 percent medium distinct dark yellowish brown (10YR 4/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

A horizon:
Color - hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 or 2
Texture - silty clay loam
Reaction - slightly acid or strongly acid

Bgc horizon:
Color - hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture- silty clay, clay, or silty clay loam
Redoximorphic concentrations and depletions - shades of brown or yellow
Reaction - strongly acid or very strongly acid

Urbo Series

MLRA: Western Coastal Plain
Geomorphic Setting: On floodplain
Parent Material: Acid clayey alluvium
Drainage Class: Somewhat poorly drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Very deep
Shrink-swell Potential: Moderate
Slope: 0 to 1 percent

Associated Soils

Amy
DeAnn
Guyton
Ouachita
Smithton
Una
Wilcox

Taxonomic Classification

Fine, mixed, active, acid, thermic Vertic Epiaquepts

Typical Pedon

Urbo silt loam in an area of Urbo silt loam; 0 to 1 percent slopes, occasionally flooded, located in a hayfield; NW 1/4 NW 14 SE 14 Sec. 27, T. 12 S., R. 23 W.

Ap—0 to 6 inches; grayish brown (10YR 5/2) silt loam; weak fine granular structure; friable; common fine and medium roots; 10 percent medium distinct brown (10YR 4/3) masses of oxidized iron; few fine brown concretions; moderately acid; abrupt smooth boundary.

A—6 to 11 inches; dark grayish brown (10YR 4/2) silt loam; weak medium subangular blocky structure; friable; common fine and medium roots; 1 percent medium distinct grayish brown (2.5Y 5/2) iron depletions; few fine brown concretions; strongly acid; clear smooth boundary.

Bg1—11 to 36 inches; grayish brown (2.5Y 5/2) silty clay loam; moderate medium subangular blocky structure parting to weak medium angular blocky; firm, moderately sticky, moderately plastic; few fine roots; 1 percent fine distinct brownish yellow (10YR 6/6) masses of oxidized iron; few stress surfaces on faces of peds; many common fine black and brown concretions; very strongly acid; clear smooth boundary.

Bg2—36 to 60 inches; gray (10YR 6/1) silty clay; moderate medium angular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; 1 percent medium distinct dark yellowish brown (10YR 4/4) masses of oxidized iron; few stress surfaces on faces of peds; many common fine black and brown concretions; very strongly acid; clear wavy boundary.

Bg3—60 to 80 inches; gray (10YR 6/1) silty clay; moderate medium angular blocky structure; firm, very sticky, very plastic; 1 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; few slickensides that do not intersect; few stress surfaces on faces of peds; many common fine black and brown concretions; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Texture - silt loam
Redoximorphic concentration and depletions - shades of brown
Reaction - slightly acid or strongly acid

Bg horizon:
Color - hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture - silty clay loam, silty clay, or clay
Redoximorphic concentrations and depletions - shades of yellow, brown, or gray
Reaction - strongly acid or very strongly acid

Warnock Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Parent Material: Loamy marine deposits
Drainage Class: Moderately well drained
Saturated Hydraulic Conductivity Class: Moderate
Soil Depth Class: Very deep
Shrink-swell Potential: Low
Slope: 1 to 7 percent

Associated Soils

Bibb
Bowie
Briley
Darden
Harleston
Pikeville
Rosalie
Ruston
Sacul
Savannah
Sawyer
Smithdale

Taxonomic Classification

Fine-loamy, siliceous, semiactive, thermic Typic Paleudults

Typical Pedon

Warnock fine sandy loam in an area of Warnock fine sandy loam, 1 to 7 percent slopes; located in a clear-cut area; NE1/4 SE1/4 NE1/4 Sec. 11, T. 14 S., R. 20 W.

A—0 to 10 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; strongly acid; clear smooth boundary.

E—10 to 16 inches; light yellowish brown (10YR 6/4) fine sandy loam; weak fine granular structure; friable; many fine and medium roots; strongly acid; clear smooth boundary.

Bt1—16 to 35 inches; yellowish brown (10YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; 25 percent faint clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—35 to 47 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; 25 percent faint clay films on faces of peds; 10 percent medium distinct light brownish gray

(10YR 6/2) iron depletions; slightly brittle in about 10 percent of mass; about 2 percent by volume plinthite nodules; very strongly acid; gradual wavy boundary.

Btx1—47 to 61 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; 25 percent distinct clay films on faces of peds; 10 percent medium prominent red (2.5YR 4/6) masses of oxidized iron; 10 percent medium distinct light brownish gray (10YR 6/2) iron depletions; slightly brittle in about 15 percent of mass; about 3 percent by volume plinthite nodules; few rounded pebbles; very strongly acid; gradual wavy boundary.

Btx2—61 to 80 inches; red (2.5YR 4/6) loam; moderate medium subangular blocky structure; friable; 50 percent faint clay films on faces of peds; 10 percent medium distinct brownish yellow (10YR 6/6) masses of oxidized iron; 10 percent medium prominent light brownish gray (10YR 6/2) iron depletions; slightly brittle in about 30 percent of mass, about 4 to 5 percent by volume plinthite nodules; few fine rounded pebbles; very strongly acid.

Range in Characteristics

Solum thickness: greater than 60 inches

A horizon:
Color - hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture - fine sandy loam
Reaction - strongly acid or very strongly acid

E horizon:
Color - hue of 10YR, value of 5 or 6, and chroma of 2 to 4
Texture - fine sandy loam or sandy loam
Reaction - strongly acid or very strongly acid

Bt horizon:
Color - hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 8
Texture - sandy clay loam, clay loam, or loam
Redoximorphic concentrations and depletions - shades of gray, brown, or yellow
Reaction - strongly acid or very strongly acid

Btx horizon:
Color - hue of 10YR, 7.5YR or 2.5YR, value of 4 to 6, and chroma of 4, 6, or 8; or variegated shades of red, brown, and gray
Texture - loam, sandy clay loam, silty clay loam, or clay loam
Redoximorphic concentrations and depletions - shades of yellow, gray, or brown
Reaction - strongly acid or very strongly acid

Wilcox Series

MLRA: Western Coastal Plain
Geomorphic Setting: On interfluve
Position on Hillslope: Backslope
Parent Material: Clayey marine deposits derived from shale
Drainage Class: Somewhat poorly drained
Saturated Hydraulic Conductivity Class: Very low
Soil Depth Class: Deep to bedrock, paralithic layer
Shrink-swell Potential: High
Slope: 1 to 15 percent

Associated Soils

Adaton
Japany
Pikeville
Prescott
Saffell
Sawyer
Una
Urbo

Taxonomic Classification

Very-fine, smectitic, thermic Chromic Dystruderts

Typical Pedon

Wilcox silty clay loam in an area of Wilcox silty clay loam, 1 to 8 percent slopes; located in a wooded area; NE 1/4 of NE 1/4 of NW 1/4 Sec. 32, T. 12 S., R. 22 W.

A—0 to 4 inches; brown (10YR 4/3) silty clay loam; weak medium subangular blocky structure; friable; many fine and medium roots; strongly acid; abrupt smooth boundary.

Bt—4 to 16 inches; red (2.5YR 4/8) clay; moderate medium subangular blocky structure; firm; common fine and medium roots; 10 percent medium prominent light brownish gray (10YR 6/2) iron depletions; clay films on peds faces and in pores; very strongly acid; clear smooth boundary.

Bss—16 to 30 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure; very firm, moderately sticky, moderately plastic; few fine roots; 10 percent medium prominent (10YR 4/8) masses of oxidized iron; 10 percent medium distinct light brownish gray (2.5Y 6/2) iron depletions; few intersecting slickensides with polished and grooved faces; very strongly acid; clear smooth boundary.

Bssg1—30 to 46 inches; gray (10YR 6/1) clay; strong fine subangular blocky, strong medium angular blocky, strong fine angular blocky, and strong medium subangular blocky structure; very firm, moderately sticky, moderately plastic; few fine roots throughout; 10 percent medium distinct red (2.5YR 4/6) and 10 percent medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; common large intersecting slickensides with polished and grooved faces; very strongly acid; gradual wavy boundary.

Bssg2—46 to 55 inches; light brownish gray (2.5Y 6/2) clay; strong fine angular blocky, strong medium subangular blocky, strong fine subangular blocky, and strong medium angular blocky structure; very firm, very sticky, very plastic; few fine roots; 10 percent medium distinct dark yellowish brown (10YR 4/6) and 10 percent medium distinct yellowish red (5YR 5/6) masses of oxidized iron; common large intersecting slickensides with polished and grooved faces; very strongly acid; abrupt wavy boundary.

Cg—55 to 59 inches; light brownish gray (2.5Y 6/2) clay; massive; very firm, very sticky, very plastic; few fine roots; 10 percent medium distinct light red (2.5YR 6/8) masses of oxidized iron; medium slickensides; few rounded pebbles; few soft clay shale fragments; very strongly acid; gradual wavy boundary.

Cr—59 to 80 inches; light brownish gray (2.5Y 6/2) weathered bedrock; very firm; few fine roots; 10 percent medium distinct yellowish brown (10YR 5/6) and 10 percent medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Solum thickness: greater than 40 inches

A horizon:
Color - hue of 10YR, value of 3 or 4, and chroma of 1 to 3
Texture - silty clay loam
Reaction - strongly acid or very strongly acid

Bt and Btss horizon:
Color - hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4, 6, or 8
Texture - silty clay or clay
Reaction - strongly acid or very strongly acid
Redoximorphic concentrations and depletions - shades of gray, brown, yellow, and red

Bssg horizon:
Color - hue of 2.5Y or 10YR, value of 5 to 7, and chroma of 1 or 2
Texture - silty clay or clay
Reaction - strongly acid or very strongly acid
Redoximorphic concentrations and depletions - shades of yellow and red

Cg horizon:
Color - hue of 2.5Y or 10YR, value of 5 to 7, and chroma of 1 or 2
Texture - clay
Reaction - very strongly acid or extremely acid
Redoximorphic concentrations and depletions - shades of yellow and brown

Cr horizon:
Color - gray or brown
Texture - soft weathered platy clay shale
Reaction - very strongly acid or extremely acid
Redoximorphic concentrations and depletions - shades of yellow and brown

Formation of the Soils

This section relates the soils in the survey area to the major factors of soil formation.

Soil is the product of soil forming processes acting on accumulated or deposited geologic material, and animal life on and in the soil; the climate under which the soil forming factors were active; topography or lay of the land; and the length of time these forces have been active.

The parent material affects the kind of soil profile that is formed, and in extreme cases, determines it almost entirely. Plant and animal life are the active factors of soil formation. The climate determines the amount of water available for leaching and the amount of heat for physical and chemical changes. Together climate and plant and animal life act on the parent material and slowly change it to a natural body that has genetically related horizons. Topography often modifies these factors. Finally, time is required for changes in the parent material to result in the formation of a soil. Generally a long time is required for the development of distinct soil horizons.

These factors of soil formation are all so closely interrelated in their effects on the soil that few generalizations can be made about the effect of any one factor unless conditions are specified for the other four. Soil formation is complex; and many processes of soil development are interrelated.

Parent Material

Parent material is the unconsolidated mass from which soil is formed. The formation or the deposition of this material is the first step in the development of a soil profile. The characteristics of the material determine the chemical and mineralogical composition of the soil. The soils of Nevada County formed in three broad classes of parent material: alluvium, deposited by local and ancient streams; marine sediment, deposited when the Gulf of Mexico covered southern and eastern Arkansas; and residuum, weathered from chalk and marl.

The parent material in the bottom lands and stream terraces is mainly alluvial deposits, which occur throughout the county. Soils such as Amy, Bibb, Guyton, Ouachita, Smithton, Una, and Urbo formed from these alluvial deposits. Parent material found on the Cretaceous Western Coastal Plain is mainly calcareous or chalk deposits, and soils such as DeAnn, Japany, and Laneburg formed from these materials. The parent material on the uplands of the Western Coastal Plains is mainly loamy and clayey marine sediments, and soils such as Bowie, Briley, Darden, Harleston, Pikeville, Rosalie, Ruston, Sacul, Saffell, Sawyer, Smithdale, and Warnock formed from these materials.

Living Organisms

Plants and animals on or in the soil are active in the soil forming process. Plants furnish organic matter to the soil and uptake plant nutrients from underlying layers to the surface layer. As plants die and decay, they contribute organic matter to the soil. Bacteria and fungi decompose the plant remains and help to incorporate the organic matter into the soil.

The kind of native vegetation is one factor that has greatly influenced soil formation in Nevada County. The basic kinds of native vegetation were hardwoods, pines and prairie grasses. Additions of organic matter to soils that formed under forest vegetation are mostly the result of leaves and twigs that decompose on the surface. Other soils have a thin, dark surface that formed under prairie grasses, and are largely a result of the yearly decomposition of plant materials. Plant tops decompose at the surface, and the roots decompose at various depths in the soil. As a result, soils that formed under prairie grasses have a dark surface layer.

Insects, worms, humans, and other animals participate in soil formation. Bacteria and fungi cause rotting of organic matter, initiate nitrogen fixation, and improve tilth. Burrowing animals and insects loosen and mix various soil horizons. In a relatively short time, human activities have greatly affected the processes of soil formation. Humans clear forests, cultivate soil, introduce new plants, and add fertilizer, lime, and chemicals to the soil for insect, disease, and weed control. Levees and dams for flood control, improved drainage, and grading the soil surface also influence the development of soils. The results of these changes may not be evident for many centuries. However, humans have drastically altered the pool of living organisms, which in turn has affected soil formation in Nevada County.

Climate

Climate has been and still is an important factor of soil formation. Geologic erosion; plant and animal life; and, in more recent times, accelerated erosion have all varied with climate. High temperatures and adequate rainfall encourage rapid chemical and physical changes. This type of climate is conducive to the breakdown of minerals and the relocation of clay within the soil. The clay is moved downward into the soil profile, and this downward movement results in the formation of the subsoil. Nearly all of the upland soils in the county show evidence of this type of clay movement.

The climate of Nevada County is characterized by short, cool winters and long, hot summers with adequate rainfall. The present climate probably is similar to the climate under which the soil formed. The average daily temperature is about 85 degrees in the summer and about 40 degrees in the winter. Average annual rainfall is about 50 inches and is generally well distributed throughout the year.

Topography

Topography, or relief, affects soil formation through its influence on drainage, runoff, rate of water infiltration, and geologic erosion. Topography is characterized by the length, shape, aspect, and degree of slope. It is important in determining the pattern and distribution of soil. The amount of water entering the soil depends on steepness of slope, permeability, and the intensity of rainfall. Because runoff is rapid in steep areas, very little water passes though the soil and soil formation is slow. Geologic erosion almost keeps pace with the soil forming processes. In gently sloping areas, runoff is slow, erosion is minimal, and most of the water passes though the soil. Illuviation, or the translocation of clay, and other soil forming processes are intensified in these areas. Soils in these areas generally show maximum profile development.

Soils on steep, south-facing slopes receive more direct sunlight and are drier than similar soils on north-facing slopes. Drier conditions influence soil formation by affecting the kind of vegetation present, the susceptibility of soils to erosion, and the cycles of freezing and thawing.

Time

The degree of profile development is dependent on the length of time that the plant material has been in place and subject to the soil-forming processes. Older soils show the effects of leaching and clay movement and have developed distinct horizons. Young soils tend to show little profile development.

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487–00. Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979.

Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors), 2002. Field book for Describing and Sampling Soils, Version 2.0. Natural Resources Conservation Service, National Soil Survey Center, Lincoln, NE.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://soils.usda.gov/technical/

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service

Soil Survey Staff. 1998. Keys to soil taxonomy. 8th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service.

United States Department of Agriculture, Forest Service. 1988. Forest statistics for Arkansas counties. Southern Forest Experimental Station Resource Bulletin SO–141.

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

United States Department of Commerce, Bureau of the Census. 1972. 1969 census of Agriculture. Volume 1. Area reports, part 34. Arkansas, section 4, county data.

United States Department of Commerce, Bureau of the Census. 2004. 2002 census of agriculture. Volume 1. Geographic area reports, part 4. Arkansas state and county data.

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.

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.

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.

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, and is expressed as:

Very low	0 to 0.05
Low	0.05 to 0.1
Moderate	0.10 to 0.17
High	0.17 to 0.22
Very high	more than 0.22

Backslope. The geomorphic component that forms the steepest inclined surface and principal element of many hillsides. Backslopes in profile are commonly steep, are linear, and may or may not include cliff segments.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

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.

Base slope. A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Board foot. A unit of measure of the wood in lumber, logs, or trees. One board foot is the amount of wood in a board 1 foot wide, 1 foot long, and 1 inch thick before finishing.

Bottomland. The normal flood plain of a stream, subject to flooding.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

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.

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.

Channeled. Refers to a drainage area in which natural meandering or repeated branching and convergence of a streambed have created deeply incised cuts, either active or abandoned, in alluvial material.

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 depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

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.

Clayey soil. Silty clay, sandy clay, or clay.

Clearcut. A method of forest harvesting that removes the entire stand of trees in one cutting. Reproduction is achieved artificially or by natural seeding from the adjacent stands.

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 fragments. Mineral or rock particles larger than 2 millimeters in diameter.

Coarse textured soil. Sand or loamy sand.

Codominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above but comparatively little from the sides.

COLE (coefficient of linear extensibility). See Linear extensibility.

Commercial forest. Forestland capable of producing 20 cubic feet or more per acre per year at the culmination of mean annual increment.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches 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.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

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.

Deep soil. A soil that is 40 to 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Deep to water (in tables). Deep to permanent water during the dry season.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

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.

Densic contact. A contact between soil and densic materials. It has no cracks, or the spacing of cracks that roots can enter is 10cm or more. Densic materials are relatively unaltered noncemented materials that only allow root penetration in the cracks.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Dominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above and from the sides.

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.

Drainageway. An area of ground at a lower elevation than the surrounding ground and in which water collects and is drained to a closed depression or lake or to a drainageway at a lower elevation. A drainageway may or may not have distinctly incised channels at its upper reaches or throughout its course.

Droughty (in tables). Soil holds too little water for plants during dry periods.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters 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.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

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.

Erodes easily (in tables). Soil is easily eroded by water.

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.

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.

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.

Flooding (in tables). Soil flooded by moving water from stream overflow or runoff.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragile (in tables). A soil that is easily damaged by use or disturbance.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

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 is 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

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.

Hard to pack (in tables). Difficult to compact using regular earthwork construction equipment.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet 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.

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, because of this a soil can be placed in a hydrologic group with low run off potential, but because of steep slope exhibit medium surface runoff. In group A are soils having a high infiltration rate when thoroughly wet and having a low runoff potential. They are mainly deep, well drained, and sandy or gravelly. In group D, at the other extreme, are soils having a very slow infiltration rate and thus a high runoff potential. They have a claypan or clay layer at or near the surface, have a permanent high water table, or are shallow over nearly impervious bedrock or other material. A soil is assigned to two hydrologic groups if part of the acreage is artificially drained and part is in its undisturbed state.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Infrequent flooding (in tables). Flooding occurs at an interval that limits riparian plant species.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. An elevated area between two drainageways that sheds water to those drainageways.

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are: 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. 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.

Ksat. Saturated hydraulic conductivity. (See Permeability.)

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.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Lithic contact. A lithic contact is a boundary between soil and a coherent underlying material. Cracks that can be penetrated by roots are few. Commonly the material is indurated, and the material below a lithic contact must be in a strongly cemented or more cemented rupture-resistance class.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loamy soil. Coarse sandy loam, sandy loam, fine sandy loam, very fine sandy loam, loam, silt loam, silt, clay loam, sandy clay loam, or silty clay loam.

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.

Mean annual increment (MAI). The average annual increase in volume of a tree during the entire life of the tree.

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.

Merchantable trees. Trees that are of sufficient size to be economically processed into wood products.

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 deep soil. A soil that is 20 to 40 inches deep over bedrock or to other material that restricts the penetration of plant roots.

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.

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

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.

Nose slope. A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Overstory. The trees in a forest that form the upper crown cover.

Oxbow. The horseshoe-shaped channel of a former meander, remaining after the stream formed a cutoff across a narrow meander neck.

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.

Paralithic contact. A contact between soil and paralithic materials. Paralithic materials are primarily unaltered extremely weakly cemented to moderately cemented rupture resistance classes. These materials can also be partially weathered bedrock or weakly consolidated bedrock, such as sandstone, siltstone, or shale.

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 downward 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.” Entries under Saturated Hydraulic Conductivity (ksat) apply to the entire soil profile. Terms describing permeability, measured in inches per hour, and saturated hydraulic conductivity, in micrometers per second, are as follows:

Permeability Class	
Very rapid	20 or more
Rapid	6.0 to < 20
Moderately rapid	2.0 to < 6.0
Moderate	0.60 to < 2.0
Moderately slow	0.20 to < 0.60
Slow	0.06 to < 0.20

Very slow	0.0015 to < 0.06
Impermeable	< 0.0015

Ksat Class (inches/hour) (micrometers/second)	
Very high	> 100
High	10 - 100
Moderate	1 - 10
Low	0.1 -1
Very Low	0.01-0.1
Impermeable	<0.01

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

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.

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.

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.

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.

Relict stream terrace. One of a series of platforms in or adjacent to a stream valley that formed prior to the current stream system.

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.

Riser. The relatively short, steeply sloping area below a terrace tread that grades to a lower terrace tread or base level.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

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.

Rock outcrop. Exposures of bare bedrock other than lava flows and rock-lined pits.

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.

Salinity. The electrical conductivity of a saline soil. It is expressed, in millimhos per centimeter, as follows:

Nonsaline	0 to 4
Slightly saline	4 to 8
Moderately saline	8 to 16
Strongly saline	more than 16

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 to2.0 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.

Sandy soil. Sand or loamy sand.

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.

Sawlogs. Logs of suitable size and quality for the production of lumber.

Scribner's log rule. A method of estimating the number of board feet that can be cut from a log of a given diameter and length.

Seasonal wetness (in tables). The soil may be wet during the period of desired use. This usually occurs during the winter and early spring.

Seasonally ponded (in tables). Standing water on soils in closed depressions. The water is removed only by percolation or evapotranspiration. Generally occurs during the winter and early spring.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shallow soil. A soil that is 10 to 20 inches deep over bedrock or to other material that restricts the penetration of plant roots.

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.

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.

Site curve (50-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for a range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees at an index age of 50 years.

Site curve (100-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for a range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees at an index age of 100 years.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Skid trails. Pathways along which logs are dragged to a common site for loading onto a logging truck.

Slash. The branches, treetops, reject logs, and broken or uprooted trees left on the ground after logging.

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.

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:

Level	0 to 1 percent
Nearly level	1 to 3 percent
Gently sloping	3 to 8 percent
Moderately steep	8 to 15 percent
Steep	15 to 35 percent
Very steep	35 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.

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.

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

Sodium adsorption ratio (SAR). 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.

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.

Species. A single, distinct kind of plant or animal having certain distinguishing characteristics.

Stickiness (surface) (in tables). The soil is slippery and sticky when wet and slow to dry.

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.

Strath terrace. A surface cut formed by the erosion of hard or semiconsolidated bedrock and thinly mantled with stream deposits.

Stream channel. The hollow bed where a natural stream of surface water flows or may flow; the deepest or central part of the bed, formed by the main current and covered more or less continuously by water.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel. It originally formed near the level of the stream and is the dissected remnants of an abandoned flood plain, streambed, or valley floor that were produced during a former stage of erosion or deposition.

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.

Substratum. The part of the soil below the solum.

Subsurface layer. Technically, the E horizon. Generally refers to a leached horizon lighter in color and lower in content of organic matter than the overlying surface layer.

Subsurface layer. Any subsurface soil horizon (A, E, AB, or EB) below the surface layer.

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.

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 outermost inclined surface at the base of a hill; part of a footslope.

Too acid (in tables). The soil is so acid that growth of plants is restricted.

Too clayey (in tables). The soil is slippery and sticky when wet and slow to dry.

Too sandy (in tables). The soil is soft and loose, droughty, and low in fertility or is too fine to use as gravel.

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.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Trafficability. The degree to which a soil is capable of supporting vehicular traffic across a wide range in soil moisture conditions.

Tread. The relatively flat surface that was cut or built by stream or wave action.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Very deep soil. A soil that is more than 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Very shallow soil. A soil that is less than 10 inches deep over bedrock or to other material that restricts the penetration of plant roots.

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.

Wetness (in tables). The soil is wet during the period of desired use.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.—Temperature and Precipitation

(Recorded in the period 1930 - 1998 at Prescott, Arkansas)

Month	Temperature (Degrees F.)						Precipitation (Inches)				
				2 yrs in 10 will have		avg # of grow deg days*		2 yrs in 10 will have		avg # of days w/.1 or more	avg total snow fall
	avg daily max	avg daily min	avg	max temp. >than	min temp. <than		avg	less than	more than		
January	53.7	32.6	43.2	77	9	52	4.68	2.00	6.97	6	1.9
February	59.3	35.9	42.7	81	14	81	4.44	2.34	6.28	6	1.1
March	67.6	42.7	55.2	86	21	217	4.98	2.95	6.79	6	0.2
April	76.7	51.5	64.1	89	32	427	5.23	2.47	7.61	6	0.0
May	83.3	59.8	71.5	94	43	662	5.21	3.03	7.16	7	0.0
June	90.3	67.5	78.9	100	54	863	3.96	1.60	5.95	5	0.0
July	94.0	70.9	82.4	104	60	997	4.32	1.82	6.44	5	0.0
August	93.7	69.9	81.8	105	58	980	3.18	1.12	4.89	4	0.0
September	87.5	63.5	75.5	101	44	762	3.71	1.38	5.65	5	0.0
October	77.8	52.2	65.0	93	33	468	4.09	1.27	6.39	4	0.0
November	64.6	41.6	53.1	83	21	166	4.92	2.21	7.24	5	0.0
December	55.8	35.1	45.4	77	13	63	4.92	2.57	6.98	6	0.5
Yearly :											
Average	75.4	51.9	63.6	---	---	---	----	----	----	---	---
Extreme	112	-4	---	106	6	---	----	----	----	---	---
Total	---	---	---	---	---	5738	53.65	45.09	61.24	65	3.7

Average # of days per year with at least 1 inch of snow on the ground: 3 days

*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: 50.0 degrees F)

Table 2.-Freeze Dates in Spring and Fall

(Recorded in the period 1930-1998 at Prescott, Arkansas)

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--	March 13	March 26	April 8
2 year in 10 later than---	March 5	March 19	April 2
5 year in 10 later than---	February 19	March 5	March 23
First freezing temperature in fall:			
1 yr in 10 earlier than--	November 10	October 3	October 26
2 yr in 10 earlier than--	November 19	November 6	October 30
5 yr in 10 earlier than--	December 5	November 19	November 8

Table 3.—Growing Season

(Recorded in the period 1938-1998 at Prescott, Arkansas)

	Daily Minimum Temperature		
Probability	# days > 24F	# days > 28F	# days > 32F
9 years in 10	252	229	206
8 years in 10	264	238	214
5 years in 10	288	257	229
2 years in 10	312	276	244
1 year in 10	325	286	252

Growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F)

Table 4.-Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AdB	Adaton silt loam, 0 to 2 percent slopes	3,174	0.8
AmB	Amy silt loam, 0 to 2 percent slopes	5,715	1.4
AnC	Angie fine sandy loam, 1 to 8 percent slopes	64	*
BbA	Bibb fine sandy loam, 0 to 1 percent slopes, frequently flooded	17,526	4.4
BoB	Bowie fine sandy loam, 1 to 3 percent slopes	5,090	1.3
BoC	Bowie fine sandy loam, 3 to 8 percent slopes	28,683	7.2
BrC	Briley loamy fine sand, 1 to 8 percent slopes	1,840	0.5
DaC	Darden loamy fine sand, 1 to 8 percent slopes	16,117	4.1
DaD	Darden loamy fine sand, 8 to 15 percent slopes	1,546	0.4
DaE	Darden loamy fine sand, 15 to 35 percent slopes	2,696	0.7
DeC	DeAnn clay, 3 to 8 percent slopes	1,940	0.5
GyB	Guyton silt loam, 0 to 2 percent slopes, frequently flooded	36,571	9.2
HaC	Harleston fine sandy loam, 1 to 8 percent slopes	6,549	1.6
JaC	Japany silt loam, 3 to 8 percent slopes	9,486	2.4
LaB	Laneburg silty clay loam, 1 to 3 percent slopes	2,804	0.7
OuA	Ouachita silt loam, 0 to 1 percent slopes, frequently flooded	1,990	0.5
PkC	Pikeville fine sandy loam, 1 to 8 percent slopes	9,956	2.5
Ps	Pits, sand	405	0.1
PtC	Prescott silt loam, 1 to 6 percent slopes	13,155	3.3
RsC	Rosalie loamy fine sand, 1 to 8 percent slopes	23,144	5.8
RuB	Ruston fine sandy loam, 1 to 3 perent slopes	4,161	1.0
SaB	Sacul fine sandy loam, 1 to 3 percent slopes	4,185	1.1
SaC	Sacul fine sandy loam, 3 to 8 percent slopes	36,263	9.1
SaD	Sacul fine sandy loam, 8 to 15 percent slopes	11,877	3.0
SaE	Sacul fine sandy loam, 15 to 35 percent slopes	18,786	4.7
SfC	Saffell gravelly fine sandy loam, 3 to 8 percent slopes	1,457	0.4
SfD	Saffell gravelly fine sandy loam, 8 to 15 percent slopes	2,710	0.7
SiB	Sardis silt loam, 0 to 2 percent slopes, frequently flooded	247	*
SnB	Savannah fine sandy loam, 1 to 3 percent slopes	41	*
SnC	Savannah fine sandy loam, 3 to 8 percent slopes	186	*
SrB	Sawyer very fine sandy loam, 1 to 3 percent slopes	1,637	0.4
SrC	Sawyer very fine sandy loam, 3 to 8 percent slopes	21,622	5.4
StC	Smithdale fine sandy loam, 3 to 8 percent slopes	9,921	2.5
StD	Smithdale fine sandy loam, 8 to 15 percent slopes	2,752	0.7
StE	Smithdale fine sandy loam, 15 to 35 percent slopes	7,735	1.9
SuB	Smithton fine sandy loam, 0 to 2 percent slopes	28,587	7.2
UnA	Una silty clay loam, 0 to 1 percent slopes, frequently flooded	17,194	4.3
UrA	Urbo silt loam, 0 to 1 percent slopes, occasionally flooded	6,452	1.6
W	Water	2,244	0.6
WaC	Warnock fine sandy loam, 1 to 7 percent slopes	18,766	4.7
WxC	Wilcox silty clay loam, 1 to 8 percent slopes	9,007	2.3
WxD	Wilcox silty clay loam, 8 to 15 percent slopes	2,935	0.7
	Total	397,216	100.0

* Less than 0.1 percent.

Table 5.-Prime Farmland with Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AdB	Adaton silt loam, 0 to 2 percent slopes (Prime farmland if drained)	3,174	0.8
AmB	Amy silt loam, 0 to 2 percent slopes (Prime farmland if drained)	5,715	1.4
BoB	Bowie fine sandy loam, 1 to 3 percent slopes	5,090	1.3
HaC	Harleston fine sandy loam, 1 to 8 percent slopes	6,549	1.6
LaB	Laneburg silty clay loam, 1 to 3 percent slopes (Prime farmland if drained)	2,804	0.7
PkC	Pikeville fine sandy loam, 1 to 8 percent slopes	9,956	2.5
RsC	Rosalie loamy fine sand, 1 to 8 percent slopes	23,144	5.8
RuB	Ruston fine sandy loam, 1 to 3 percent slopes	4,161	1.0
SnB	Savannah fine sandy loam, 1 to 3 percent slopes	41	*
SrB	Sawyer very fine sandy loam, 1 to 3 percent slopes	1,637	0.4
SuB	Smithton fine sandy loam, 0 to 2 percent slopes (Prime farmland if drained)	28,587	7.2
UrA	Urbo silt loam, 0 to 1 percent slopes, occasionally flooded (Prime farmland if drained)	6,452	1.6
WaC	Warnock fine sandy loam, 1 to 7 percent slopes	18,766	4.7
	Total	116,076	29.2

* Less than 0.1 percent.

Table 6.-Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. 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	Bahiagrass	Common bermudagrass	Corn	Improved bermudagrass	Soybeans	Tall fescue	Watermelons	Wheat
		AUM	*AUM*	*Bu*	*AUM*	*Bu*	*AUM*	*Tons*	*Bu*
AdB:									
Adaton--------	3w	8.00	6.00	70.00	8.00	30.00	8.00	---	35.00
AmB:									
Amy-----------	3w	7.50	6.00	---	7.50	25.00	6.50	---	---
AnC:									
Angie---------	3e	7.50	6.00	---	7.00	---	6.00	---	30.00
BbA:									
Bibb----------	5w	---	5.00	---	6.50	---	5.00	---	---
BoB:									
Bowie---------	2e	6.00	6.00	85.00	5.00	20.00	6.00	---	30.00
BoC:									
Bowie---------	3e	5.00	5.00	---	7.00	---	5.00	---	25.00
BrC:									
Briley--------	3s	---	7.00	60.00	9.00	---	---	12.00	30.00
DaC:									
Darden--------	4s	---	5.00	---	6.50	---	---	8.00	---
DaD:									
Darden--------	6s	---	4.50	---	6.00	---	---	---	---
DaE:									
Darden--------	6s	---	4.00	---	5.00	---	---	---	---
DeC:									
DeAnn---------	4e	---	5.00	---	6.00	---	6.00	---	25.00
GyB:									
Guyton--------	5w	---	6.00	---	7.00	---	---	---	---
HaC:									
Harleston-----	3e	8.50	7.00	85.00	9.00	25.00	---	---	25.00
JaC:									
Japany--------	4e	6.50	6.00	---	8.00	---	6.00	---	30.00
LaB:									
Laneburg------	3w	---	6.00	---	8.00	20.00	6.00	---	30.00

Table 6.-Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Corn	Improved bermudagrass	Soybeans	Tall fescue	Watermelons	Wheat
		AUM	*AUM*	*Bu*	*AUM*	*Bu*	*AUM*	*Tons*	*Bu*
OuA:									
Ouachita------	5w	7.00	7.00	---	9.00	30.00	7.00	---	---
PkC:									
Pikeville-----	3e	7.50	6.00	---	7.50	---	6.50	---	---
PtC:									
Prescott------	3e	8.00	7.00	---	9.00	20.00	7.50	---	30.00
RsC:									
Rosalie-------	3s	---	5.50	50.00	7.00	---	6.00	---	---
RuB:									
Ruston--------	2e	8.50	7.00	70.00	9.00	25.00	7.00	---	40.00
SaB:									
Sacul---------	3e	7.50	6.50	65.00	7.50	---	6.50	---	30.00
SaC:									
Sacul---------	4e	7.00	6.00	---	7.00	---	6.00	---	25.00
SaD:									
Sacul---------	6e	6.00	5.00	---	6.00	---	---	---	---
SaE:									
Sacul---------	7e	---	4.00	---	5.00	---	---	---	---
SfC:									
Saffell-------	4s	5.50	4.50	---	6.00	---	---	---	30.00
SfD:									
Saffell-------	6s	5.00	4.00	---	5.50	---	---	---	---
SiB:									
Sardis--------	4w	6.00	6.00	---	8.00	30.00	---	---	---
SnB:									
Savannah------	2e	9.00	7.00	75.00	8.50	25.00	8.00	---	30.00
SnC:									
Savannah------	3e	8.00	6.00	60.00	8.00	20.00	7.50	---	30.00
SrB:									
Sawyer--------	2e	---	7.00	---	8.50	25.00	7.00	---	35.00

Table 6.-Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Corn	Improved bermudagrass	Soybeans	Tall fescue	Watermelons	Wheat
		AUM	*AUM*	*Bu*	*AUM*	*Bu*	*AUM*	*Tons*	*Bu*
SrC:									
Sawyer--------	3e	---	6.00	---	8.00	---	6.00	---	30.00
StC:									
Smithdale-----	3e	8.00	6.00	70.00	8.00	20.00	7.00	---	30.00
StD:									
Smithdale-----	4e	7.00	5.00	---	7.00	---	6.00	---	---
StE:									
Smithdale-----	6e	---	---	---	---	---	---	---	---
SuB:									
Smithton------	3w	7.50	7.00	---	8.00	25.00	7.00	---	30.00
UnA:									
Una-----------	4w	---	7.00	---	7.50	20.00	7.00	---	---
UrA:									
Urbo----------	2w	---	7.00	---	9.00	30.00	8.00	---	35.00
WaC:									
Warnock-------	3e	7.00	7.00	---	8.00	20.00	7.00	---	30.00
WxC:									
Wilcox--------	3e	7.00	6.50	---	7.50	---	7.50	---	30.00
WxD:									
Wilcox--------	6e	6.00	5.50	---	6.50	---	6.00	---	---

Table 7a.-Forest Productivity

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AdB:				
Adaton	loblolly pine	93	138	loblolly pine, shortleaf pine, Shumard's oak
	water oak	85	80	
	shortleaf pine	84	138	
	sweetgum	85	93	
	willow oak	80	74	
AmB:				
Amy	loblolly pine	93	138	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
	sweetgum	90	106	
	water oak	85	80	
	willow oak	85	80	
AnC:				
Angie	loblolly pine	92	136	loblolly pine, shortleaf pine
	shortleaf pine	83	136	
	sweetgum	85	93	
	southern red oak	70	52	
BbA:				
Bibb	water oak	90	86	Nuttall oak, green ash
	sweetgum	90	106	
	blackgum	---	0	
	willow oak	85	80	
BoB:				
Bowie	loblolly pine	80	123	loblolly pine, shortleaf pine
	shortleaf pine	70	130	
	sweetgum	74	84	
	southern red oak	70	57	
BoC:				
Bowie	loblolly pine	86	123	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
	sweetgum	82	84	
	southern red oak	75	57	
BrC:				
Briley	loblolly pine	90	131	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
	sweetgum	85	93	
DaC:				
Darden	loblolly pine	90	131	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
DaD:				
Darden	loblolly pine	90	131	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
DaE:				
Darden	loblolly pine	90	131	loblolly pine, shortleaf pine
	shortleaf pine	80	130	
DeC:				
DeAnn	eastern redcedar	47	57	eastern redcedar
	common hackberry	60	---	

Table 7a.-Forest Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
GyB:				
Guyton------------------	Nuttall oak---------	85	80	green ash, Nuttall oak
	green ash----------	100	82	
	sweetgum-----------	90	106	
	willow oak----------	85	80	
	water oak-----------	85	80	
HaC:				
Harleston---------------	loblolly pine-------	94	140	loblolly pine, shortleaf pine
	shortleaf pine------	85	140	
	sweetgum-----------	86	95	
JaC:				
Japany------------------	loblolly pine-------	90	131	cherrybark oak, loblolly pine, shortleaf pine, Shumard's oak
	shortleaf pine------	84	138	
	cherrybark oak------	90	115	
	sweetgum-----------	90	106	
	water oak-----------	80	74	
	white oak-----------	80	57	
LaB:				
Laneburg----------------	loblolly pine-------	85	120	loblolly pine, shortleaf pine
	shortleaf pine------	80	130	
	sweetgum-----------	80	86	
	eastern redcedar----	45	57	
	white oak-----------	---	0	
	southern red oak----	70	52	
OuA:				
Ouachita----------------	loblolly pine-------	100	154	cherrybark oak, eastern cottonwood, loblolly pine, shortleaf pine
	shortleaf pine------	90	150	
	sweetgum-----------	100	138	
	eastern cottonwood--	100	129	
	cherrybark oak------	100	151	
PkC:				
Pikeville---------------	loblolly pine-------	80	110	loblolly pine, shortleaf pine
	shortleaf pine------	70	110	
	southern red oak----	70	52	
	sweetgum-----------	74	66	
Ps:				
Pits--------------------	---	---	---	---
PtC:				
Prescott----------------	loblolly pine-------	88	127	loblolly pine, shortleaf pine, cherrybark oak
	shortleaf pine------	80	130	
	southern red oak----	70	52	
	sweetgum-----------	84	90	
RsC:				
Rosalie-----------------	loblolly pine-------	95	142	loblolly pine, shortleaf pine
	shortleaf pine------	85	140	
	sweetgum-----------	85	93	
RuB:				
Ruston------------------	loblolly pine-------	93	138	loblolly pine, shortleaf pine
	shortleaf pine------	84	138	
	southern red oak----	75	57	
	sweetgum-----------	85	93	

Table 7a.-Forest Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
SaB:				
Sacul-------------------	loblolly pine-------	94	140	loblolly pine,
	shortleaf pine------	84	138	shortleaf pine
	sweetgum-----------	85	93	
	southern red oak----	70	52	
SaC:				
Sacul-------------------	loblolly pine-------	94	140	loblolly pine,
	shortleaf pine------	84	138	shortleaf pine
	sweetgum-----------	85	93	
	southern red oak----	70	52	
SaD:				
Sacul-------------------	loblolly pine-------	94	140	loblolly pine,
	shortleaf pine------	84	138	shortleaf pine
	sweetgum-----------	85	93	
	southern red oak----	70	52	
SaE:				
Sacul-------------------	loblolly pine-------	94	140	loblolly pine,
	shortleaf pine------	84	138	shortleaf pine
	sweetgum-----------	85	93	
	southern red oak----	70	52	
SfC:				
Saffell-----------------	loblolly pine-------	74	100	loblolly pine,
	shortleaf pine------	65	99	shortleaf pine
	southern red oak----	60	43	
	sweetgum-----------	70	57	
	white oak-----------	---	0	
SfD:				
Saffell-----------------	loblolly pine-------	74	100	loblolly pine,
	shortleaf pine------	65	99	shortleaf pine
	southern red oak----	60	43	
	sweetgum-----------	70	57	
	white oak-----------	---	0	
SiB:				
Sardis------------------	loblolly pine-------	96	145	cherrybark oak,
	cherrybark oak------	95	133	loblolly pine,
	sweetgum-----------	100	138	shortleaf pine
	water oak-----------	85	80	
	shortleaf pine------	88	146	
	willow oak----------	80	74	
SnB:				
Savannah----------------	loblolly pine-------	88	127	loblolly pine,
	shortleaf pine------	80	130	shortleaf pine
	southern red oak----	75	57	
	sweetgum-----------	82	84	
SnC:				
Savannah----------------	loblolly pine-------	88	127	loblolly pine,
	shortleaf pine------	80	130	shortleaf pine
	southern red oak----	75	57	
	sweetgum-----------	82	84	

Table 7a.-Forest Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
SrB:				
Sawyer------------------	loblolly pine-------	94	140	loblolly pine, shortleaf pine
	shortleaf pine------	83	136	
	southern red oak----	75	57	
	sweetgum-----------	85	93	
SrC:				
Sawyer------------------	loblolly pine-------	94	140	loblolly pine, shortleaf pine
	shortleaf pine------	83	136	
	southern red oak----	75	57	
	sweetgum-----------	85	93	
StC:				
Smithdale---------------	loblolly pine-------	90	131	loblolly pine, shortleaf pine
	shortleaf pine------	82	134	
	southern red oak----	75	57	
	sweetgum-----------	85	93	
StD:				
Smithdale---------------	loblolly pine-------	90	131	loblolly pine, shortleaf pine
	shortleaf pine------	82	134	
	southern red oak----	75	57	
	sweetgum-----------	85	93	
StE:				
Smithdale---------------	loblolly pine-------	90	131	loblolly pine, shortleaf pine
	shortleaf pine------	82	134	
	southern red oak----	75	57	
	sweetgum-----------	85	93	
SuB:				
Smithton----------------	loblolly pine-------	96	145	cherrybark oak, loblolly pine, shortleaf pine, Shumard's oak
	shortleaf pine------	86	142	
	sweetgum-----------	90	106	
	water oak----------	90	86	
	cherrybark oak------	90	115	
	willow oak---------	85	80	
UnA:				
Una---------------------	cherrybark oak------	90	114	green ash, Nuttall oak
	green ash----------	75	41	
	Nuttall oak---------	95	0	
	sweetgum-----------	90	106	
	water oak----------	90	86	
	willow oak---------	90	86	
UrA:				
Urbo--------------------	cherrybark oak------	99	147	Nuttall oak, green ash, American sycamore, eastern cottonwood
	water oak----------	90	86	
	willow oak---------	90	86	
	sweetgum-----------	98	132	
	green ash----------	93	70	
W:				
Water-------------------	---	---	---	---

Table 7a.-Forest Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
WaC:				
Warnock	loblolly pine	92	136	loblolly pine, shortleaf pine
	shortleaf pine	83	136	
	southern red oak	75	57	
	sweetgum	85	93	
WxC:				
Wilcox	loblolly pine	83	116	loblolly pine, shortleaf pine
	shortleaf pine	74	118	
	sweetgum	75	68	
WxD:				
Wilcox	loblolly pine	83	116	loblolly pine, shortleaf pine
	shortleaf pine	74	118	
	sweetgum	75	68	

Table 7b.-Forest 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	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
AdB:							
Adaton	90	Moderate		Poorly suited		Severe	
		Low strength	0.50	Wetness	1.00	Low strength	1.00
				Low strength	0.50		
AmB:							
Amy	95	Moderate		Poorly suited		Severe	
		Low strength	0.50	Wetness	1.00	Low strength	1.00
				Low strength	0.50		
AnC:							
Angie	90	Slight		Well suited		Moderate	
						Low strength	0.50
BbA:							
Bibb	95	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
				Wetness	1.00		
BoB:							
Bowie	95	Slight		Well suited		Moderate	
						Low strength	0.50
BoC:							
Bowie	100	Slight		Well suited		Moderate	
						Low strength	0.50
BrC:							
Briley	100	Slight		Well suited		Moderate	
						Low strength	0.50
DaC:							
Darden	100	Slight		Well suited		Moderate	
						Low strength	0.50
DaD:							
Darden	100	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
DaE:							
Darden	100	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
DeC:							
DeAnn	92	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
		Stickiness/slope	0.50	Stickiness; high plasticity index	0.50		
GyB:							
Guyton	90	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Wetness	1.00		
				Low strength	0.50		

Table 7b.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
HaC:							
Harleston-----------	85	Slight		Well suited		Moderate	
						Low strength	0.50
JaC:							
Japany--------------	95	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
		Stickiness/slope	0.50	Wetness	0.50		
LaB:							
Laneburg------------	85	Moderate		Poorly suited		Severe	
		Stickiness/slope	0.50	Wetness	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		
OuA:							
Ouachita------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
PkC:							
Pikeville-----------	100	Slight		Well suited		Moderate	
						Low strength	0.50
Ps:							
Pits----------------	100	Not rated		Not rated		Not rated	
PtC:							
Prescott------------	85	Moderate		Moderately suited		Severe	
		Stickiness/slope	0.50	Low strength	0.50	Low strength	1.00
		Low strength	0.50				
RsC:							
Rosalie-------------	100	Moderate		Moderately suited		Moderate	
		Sandiness	0.50	Sandiness	0.50	Low strength	0.50
RuB:							
Ruston--------------	100	Slight		Well suited		Moderate	
						Low strength	0.50
SaB:							
Sacul---------------	95	Slight		Well suited		Moderate	
						Low strength	0.50
SaC:							
Sacul---------------	100	Slight		Well suited		Moderate	
						Low strength	0.50
SaD:							
Sacul---------------	100	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
SaE:							
Sacul---------------	100	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
SfC:							
Saffell-------------	100	Slight		Well suited		Slight	
						Strength	0.10

Table 7b.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
SfD:							
Saffell	100	Slight		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
SiB:							
Sardis	90	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
SnB:							
Savannah	95	Slight		Well suited		Moderate	
						Low strength	0.50
SnC:							
Savannah	100	Slight		Well suited		Moderate	
						Low strength	0.50
SrB:							
Sawyer	95	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
SrC:							
Sawyer	100	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
StC:							
Smithdale	100	Slight		Well suited		Moderate	
						Low strength	0.50
StD:							
Smithdale	100	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
StE:							
Smithdale	100	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
SuB:							
Smithton	85	Slight		Poorly suited		Severe	
				Wetness	1.00	Low strength	1.00
				Low strength	0.50		
UnA:							
Una	90	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Wetness	1.00		
		Stickiness/slope	0.50	Low strength	0.50		
UrA:							
Urbo	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
				Wetness	0.50		
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Slight		Well suited		Moderate	
						Low strength	0.50

Table 7b.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WxC:							
Wilcox--------------	95	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
WxD:							
Wilcox--------------	100	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		

Table 7c.-Forest 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	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
AdB:							
Adaton	90	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
AmB:							
Amy	95	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
AnC:							
Angie	90	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
BbA:							
Bibb	95	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
BoB:							
Bowie	95	Slight		Slight		Well suited	
BoC:							
Bowie	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
BrC:							
Briley	100	Slight		Slight		Well suited	
DaC:							
Darden	100	Slight		Slight		Well suited	
DaD:							
Darden	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
DaE:							
Darden	100	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
DeC:							
DeAnn	92	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Stickiness; high plasticity index	0.50
GyB:							
Guyton	90	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
HaC:							
Harleston	85	Slight		Slight		Well suited	

Table 7c.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
JaC:							
Japany	95	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Wetness	0.50
LaB:							
Laneburg	85	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
						Stickiness; high plasticity index	0.50
OuA:							
Ouachita	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
PkC:							
Pikeville	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
RsC:							
Rosalie	100	Slight		Slight		Moderately suited	
						Sandiness	0.50
RuB:							
Ruston	100	Slight		Slight		Well suited	
SaB:							
Sacul	95	Slight		Slight		Well suited	
SaC:							
Sacul	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
SaD:							
Sacul	100	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
SaE:							
Sacul	100	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
SfC:							
Saffell	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
SfD:							
Saffell	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50

Table 7c.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SiB:							
Sardis	90	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
SnB:							
Savannah	95	Slight		Slight		Well suited	
SnC:							
Savannah	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
SrB:							
Sawyer	95	Slight		Slight		Moderately suited	
						Low strength	0.50
SrC:							
Sawyer	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
StC:							
Smithdale	100	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
StD:							
Smithdale	100	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
StE:							
Smithdale	100	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
SuB:							
Smithton	85	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
UnA:							
Una	90	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
UrA:							
Urbo	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
						Wetness	0.50
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
WxC:							
Wilcox	95	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50

Table 7c.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WxD:							
Wilcox----------------	100	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50

Table 7d-Forest 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	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
AdB:							
Adaton	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
AmB:							
Amy	95	Well suited		Well suited		Moderately suited	
						Low strength	0.50
AnC:							
Angie	90	Well suited		Well suited		Well suited	
BbA:							
Bibb	95	Well suited		Well suited		Well suited	
BoB:							
Bowie	95	Well suited		Well suited		Well suited	
BoC:							
Bowie	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
BrC:							
Briley	100	Well suited		Well suited		Well suited	
DaC:							
Darden	100	Well suited		Well suited		Well suited	
DaD:							
Darden	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
DaE:							
Darden	100	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
DeC:							
DeAnn	92	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50	Stickiness; high plasticity index	0.50
GyB:							
Guyton	90	Well suited		Well suited		Moderately suited	
						Low strength	0.50
HaC:							
Harleston	85	Well suited		Well suited		Well suited	
JaC:							
Japany	95	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		

Table 7d-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
LaB:							
Laneburg	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
OuA:							
Ouachita	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
PkC:							
Pikeville	100	Well suited		Well suited		Well suited	
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
RsC:							
Rosalie	100	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
RuB:							
Ruston	100	Well suited		Well suited		Well suited	
SaB:							
Sacul	95	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
SaC:							
Sacul	100	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
				Slope	0.50		
SaD:							
Sacul	100	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
				Slope	0.50		
SaE:							
Sacul	100	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Slope	0.50
				Stickiness; high plasticity index	0.50		
SfC:							
Saffell	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
SfD:							
Saffell	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		

Table 7d-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
SiB:							
Sardis	90	Well suited		Well suited		Moderately suited	
						Low strength	0.50
SnB:							
Savannah	95	Well suited		Well suited		Well suited	
SnC:							
Savannah	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
SrB:							
Sawyer	95	Well suited		Well suited		Moderately suited	
						Low strength	0.50
SrC:							
Sawyer	100	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
StC:							
Smithdale	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
StD:							
Smithdale	100	Well suited		Moderately suited		Well suited	
				Slope	0.50		
StE:							
Smithdale	100	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
SuB:							
Smithton	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
UnA:							
Una	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
						Stickiness; high plasticity index	0.50
UrA:							
Urbo	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Well suited		Well suited		Well suited	
WxC:							
Wilcox	95	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50

Table 7d-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
WxD:							
Wilcox	100	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		

Table 7e.-Forest 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	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:									
Adaton	90	Well suited		Well suited		Low		High	
						Texture/rock fragments	0.10	Wetness	1.00
AmB:									
Amy	95	Well suited		Well suited		High		High	
						Texture/surface depth/rock fragments	1.00	Wetness	1.00
AnC:									
Angie	90	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		
BbA:									
Bibb	95	Well suited		Well suited		Moderate		High	
						Texture/surface depth/rocks	0.50	Wetness	1.00
BoB:									
Bowie	95	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		
BoC:									
Bowie	100	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		
BrC:									
Briley	100	Well suited		Well suited		High		Low	
						Texture/surface depth/rock fragments	1.00		

Table 7e.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DaC:									
Darden	100	Well suited		Well suited		High		Low	
						Texture/rock fragments	1.00		
DaD:									
Darden	100	Well suited		Well suited		High		Low	
						Texture/rock fragments	1.00		
DaE:									
Darden	100	Poorly suited		Poorly suited		High		Moderate	
		Slope	0.50	Slope	0.50	Texture/rock fragments	1.00	Available water	0.50
DeC:									
DeAnn	92	Poorly suited		Well suited		Moderate		Low	
		Stickiness; high plasticity index	0.50			Texture/rock fragments	0.50		
GyB:									
Guyton	90	Well suited		Well suited		Moderate		High	
						Texture/surface depth/rock fragments	0.50	Wetness	1.00
HaC:									
Harleston	85	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
JaC:									
Japany	95	Poorly suited		Well suited		Moderate		High	
		Stickiness; high plasticity index	0.50			Texture/surface depth/rock fragments	0.50	Wetness	1.00
LaB:									
Laneburg	85	Poorly suited		Well suited		Moderate		High	
		Stickiness; high plasticity index	0.50			Texture/rock fragments	0.50	Wetness	1.00

Table 7e.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
OuA:									
Ouachita	85	Well suited		Well suited		Moderate		Low	
						Texture/surface depth/rock fragments	0.50		
PkC:									
Pikeville	100	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		
Ps:									
Pits	100	Not rated		Not rated		Not rated		Not rated	
PtC:									
Prescott	85	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		
RsC:									
Rosalie	100	Well suited		Well suited		High		Low	
						Texture/rock fragments	1.00		
RuB:									
Ruston	100	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
SaB:									
Sacul	95	Poorly suited		Well suited		Moderate		Low	
		Stickiness; high plasticity index	0.50			Texture/surface depth/rock fragments	0.50		
SaC:									
Sacul	100	Poorly suited		Well suited		Moderate		Low	
		Stickiness; high plasticity index	0.50			Texture/surface depth/rock fragments	0.50		

Table 7e.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
SaD:									
Sacul---------------	100	Poorly suited Stickiness; high plasticity index	 0.50	Well suited		Moderate Texture/surface depth/rock fragments	 0.50	Low	
SaE:									
Sacul---------------	100	Poorly suited Slope Stickiness; high plasticity index	 0.50 0.50	Poorly suited Slope	 0.50	Moderate Texture/surface depth/rock fragments	 0.50	Moderate Available water	 0.50
SfC:									
Saffell-------------	100	Well suited		Well suited		Moderate Texture/rock fragments	 0.50	Low	
SfD:									
Saffell-------------	100	Well suited		Well suited		Moderate Texture/rock fragments	 0.50	Low	
SiB:									
Sardis--------------	90	Well suited		Well suited		Low Texture/rock fragments	 0.10		
SnB:									
Savannah------------	95	Well suited		Well suited		Moderate Texture/rock fragments	 0.50	Low Low	
SnC:									
Savannah------------	100	Well suited		Well suited		Moderate Texture/rock fragments	 0.50	Low	
SrB:									
Sawyer--------------	95	Well suited		Well suited		Low Texture/rock fragments	 0.10	Low	

Table 7e.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
SrC:									
Sawyer	100	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
StC:									
Smithdale	100	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
StD:									
Smithdale	100	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
StE:									
Smithdale	100	Poorly suited		Poorly suited		Low		Moderate	
		Slope	0.50	Slope	0.50	Texture/rock fragments	0.10	Available water	0.50
SuB:									
Smithton	85	Well suited		Well suited		Moderate		High	
						Texture/surface depth/rock fragments	0.50	Wetness	1.00
UnA:									
Una	90	Poorly suited		Well suited		Low		High	
		Stickiness; high plasticity index	0.50			Texture/rock fragments	0.10	Wetness	1.00
UrA:									
Urbo	85	Well suited		Well suited		Low		Low	
						Texture/rock fragments	0.10		
W:									
Water	100	Not rated		Not rated		Not rated		Not rated	
WaC:									
Warnock	95	Well suited		Well suited		Moderate		Low	
						Texture/rock fragments	0.50		

Table 7e.-Forest Management--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WxC:									
Wilcox	95	Poorly suited		Well suited		Moderate		Low	
		Stickiness; high plasticity index	0.50			Texture/surface depth/rock fragments	0.50		
WxD:									
Wilcox	100	Poorly suited		Well suited		Moderate		Low	
		Stickiness; high plasticity index	0.50			Texture/surface depth/rock fragments	0.50		

Table 8a.-Recreational Development

(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
AdB:							
Adaton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
AmB:							
Amy	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
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
AnC:							
Angie	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
BbA:							
Bibb	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	Flooding	0.40	Flooding	1.00
BoB:							
Bowie	95	Not limited		Not limited		Not limited	
BoC:							
Bowie	100	Not limited		Not limited		Somewhat limited	
						Slope	0.88
BrC:							
Briley	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.58	Too sandy	0.58	Too sandy	0.58
						Slope	0.50
DaC:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.31	Too sandy	0.31	Slope	0.50
						Too sandy	0.31
DaD:							
Darden	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Too sandy	0.31	Too sandy	0.31	Too sandy	0.31
DaE:							
Darden	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.31	Too sandy	0.31	Too sandy	0.31

Table 8a.-Recreational Development--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
DeC:							
DeAnn	92	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
						Slope	0.88
GyB:							
Guyton	90	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
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
HaC:							
Harleston	85	Not limited		Not limited		Somewhat limited	
						Slope	0.50
JaC:							
Japany	95	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.96	Depth to saturated zone	1.00
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.88
LaB:							
Laneburg	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
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
OuA:							
Ouachita	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
PkC:							
Pikeville	100	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Slow water movement	0.26	Depth to saturated zone	0.39
		Slow water movement	0.26	Depth to saturated zone	0.19	Slow water movement	0.26
						Slope	0.12
RsC:							
Rosalie	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
						Slope	0.50

Table 8a.-Recreational Development--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
RuB:							
Ruston	100	Not limited		Not limited		Not limited	
SaB:							
Sacul	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
		Too sandy	0.01	Too sandy	0.01	Gravel content	0.06
						Too sandy	0.01
SaC:							
Sacul	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
		Too sandy	0.01	Too sandy	0.01	Slope	0.88
						Gravel content	0.06
SaD:							
Sacul	100	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.63	Slope	0.63	Slow water movement	0.96
		Too sandy	0.01	Too sandy	0.01	Gravel content	0.06
SaE:							
Sacul	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
		Too sandy	0.01	Too sandy	0.01	Gravel content	0.06
SfC:							
Saffell	100	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
		Too sandy	0.01	Too sandy	0.01	Slope	0.88
						Too sandy	0.01
SfD:							
Saffell	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
SiB:							
Sardis	90	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Depth to saturated zone	0.07
SnB:							
Savannah	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
SnC:							
Savannah	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Slope	0.88
						Depth to saturated zone	0.39

Table 8a.-Recreational Development--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
SrB: Sawyer	95	Somewhat limited Depth to saturated zone	 0.39	Somewhat limited Depth to saturated zone	 0.19	Somewhat limited Depth to saturated zone	 0.39
SrC: Sawyer	100	Somewhat limited Depth to saturated zone	 0.39	Somewhat limited Depth to saturated zone	 0.19	Somewhat limited Slope Depth to saturated zone	 0.88 0.39
StC: Smithdale	100	Not limited		Not limited		Somewhat limited Slope	 0.88
StD: Smithdale	100	Somewhat limited Slope	 0.63	Somewhat limited Slope	 0.63	Very limited Slope	 1.00
StE: Smithdale	100	Very limited Slope	 1.00	Very limited Slope	 1.00	Very limited Slope	 1.00
SuB: Smithton	85	Very limited Depth to saturated zone Slow water movement	 1.00 0.26	Very limited Depth to saturated zone Slow water movement	 1.00 0.26	Very limited Depth to saturated zone Slow water movement	 1.00 0.26
UnA: Una	90	Very limited Depth to saturated zone Flooding Slow water movement	 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Slow water movement	 1.00 1.00 1.00
UrA: Urbo	85	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 0.98	Very limited Slow water movement Depth to saturated zone	 1.00 0.75	Very limited Slow water movement Depth to saturated zone Flooding	 1.00 0.98 0.60
W: Water	100	Not rated		Not rated		Not rated	
WaC: Warnock	95	Not limited		Not limited		Somewhat limited Slope	 0.50

Table 8a.-Recreational Development--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
WxC:							
Wilcox--------------	95	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Slope	0.50
						Depth to saturated zone	0.07
WxD:							
Wilcox--------------	100	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Slow water movement	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Depth to saturated zone	0.07

Table 8b.-Recreational Development

(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
AdB:							
Adaton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
AmB:							
Amy	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
AnC:							
Angie	90	Not limited		Not limited		Not limited	
BbA:							
Bibb	95	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
BoB:							
Bowie	95	Not limited		Not limited		Not limited	
BoC:							
Bowie	100	Not limited		Not limited		Not limited	
BrC:							
Briley	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.58	Too sandy	0.58	Droughty	0.01
DaC:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.31	Too sandy	0.31	Droughty	0.69
DaD:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.31	Too sandy	0.31	Droughty	0.69
						Slope	0.63
DaE:							
Darden	100	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.31	Slope	1.00
		Too sandy	0.31			Droughty	0.69
DeC:							
DeAnn	92	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
GyB:							
Guyton	90	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
HaC:							
Harleston	85	Not limited		Not limited		Not limited	

Table 8b.-Recreational Development--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
JaC:							
Japany	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.92	Depth to saturated zone	0.92	Depth to saturated zone	0.96
LaB:							
Laneburg	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
OuA:							
Ouachita	85	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
PkC:							
Pikeville	100	Not limited		Not limited		Not limited	
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
RsC:							
Rosalie	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Droughty	0.15
RuB:							
Ruston	100	Not limited		Not limited		Not limited	
SaB:							
Sacul	95	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
SaC:							
Sacul	100	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
SaD:							
Sacul	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Slope	0.63
SaE:							
Sacul	100	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.01	Slope	1.00
		Too sandy	0.01				
SfC:							
Saffell	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Gravel content	0.41
SfD:							
Saffell	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Slope	0.63
						Gravel content	0.41

Table 8b.-Recreational Development--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
SiB:							
Sardis	90	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
						Depth to saturated zone	0.03
SnB:							
Savannah	95	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
SnC:							
Savannah	100	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
SrB:							
Sawyer	95	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
SrC:							
Sawyer	100	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
StC:							
Smithdale	100	Not limited		Not limited		Not limited	
StD:							
Smithdale	100	Not limited		Not limited		Somewhat limited	
						Slope	0.63
StE:							
Smithdale	100	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
SuB:							
Smithton	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
UnA:							
Una	90	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
UrA:							
Urbo	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
						Flooding	0.60
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Not limited		Not limited		Not limited	

Table 8b.-Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf fairways: Rating class and limiting features	Golf fairways: Value
WxC:							
Wilcox--------------	95	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.03
WxD:							
Wilcox--------------	100	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.63
						Depth to saturated zone	0.03

Table 9a.-Fish and Wildlife Habitat

(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	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland wild herbaceous plants		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:									
Adaton	90	Very limited Wetness Potentially or highly erodible Percs slowly	 1.00 1.00 0.48	Very limited Wetness Potentially or highly erodible Percs slowly	 1.00 1.00 0.48	Very limited Wetness	 1.00	Very limited Wetness	 1.00
AmB:									
Amy	95	Very limited Wetness Potentially or highly erodible	 1.00 1.00	Very limited Wetness Potentially or highly erodible	 1.00 1.00	Very limited Wetness	 1.00	Very limited Wetness	 1.00
AnC:									
Angie	90	Very limited Potentially or highly erodible Percs slowly	 1.00 0.48	Very limited Potentially or highly erodible Percs slowly	 1.00 0.48	Not limited		Not limited	
BbA:									
Bibb	95	Very limited Flooding Wetness	 1.00 1.00	Very limited Flooding Wetness	 1.00 1.00	Very limited Wetness	 1.00	Very limited Wetness	 1.00
BoB:									
Bowie	95	Very limited Potentially or highly erodible Droughty	 1.00 0.32	Very limited Potentially or highly erodible	 1.00	Not limited		Not limited	
BoC:									
Bowie	100	Very limited Potentially or highly erodible Droughty	 1.00 0.32	Very limited Potentially or highly erodible	 1.00	Not limited		Not limited	

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover: Rating class and limiting features	Value	Domestic grasses and legumes for food and cover: Rating class and limiting features	Value	Upland wild herbaceous plants: Rating class and limiting features	Value	Upland shrubs and vines: Rating class and limiting features	Value
BrC:									
Briley	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Too sandy	0.50	Droughty	0.01
		Droughty	1.00	Too sandy	0.50	Droughty	0.01		
		Too sandy	0.50	Droughty	0.01				
DaC:									
Darden	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Droughty	1.00	Potentially or highly erodible	1.00	Droughty	0.68	Droughty	0.68
		Potentially or highly erodible	1.00	Droughty	0.68	Too sandy	0.50		
		Too sandy	0.50	Too sandy	1.50				
DaD:									
Darden	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Droughty	1.00	Potentially or highly erodible	1.00	Droughty	0.68	Droughty	0.68
		Potentially or highly erodible	1.00	Droughty	0.68	Too sandy	0.50		
		Too sandy	0.50	Too sandy	0.50				
DaE:									
Darden	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Droughty	1.00	Potentially or highly erodible	1.00	Droughty	0.68	Droughty	0.68
		Potentially or highly erodible	1.00	Slope	0.78	Too sandy	0.50		
		Slope	0.78	Droughty	0.68				
		Too sandy	0.50	Too sandy	0.50				
DeC:									
DeAnn	92	Very limited		Very limited		Very limited		Very limited	
		Too clayey	1.00	Potentially or highly erodible	1.00	Too clayey	1.00	Too clayey	1.00
		Potentially or highly erodible	1.00	Too clayey	1.00				
		Percs slowly	0.50	Percs slowly	0.50				
		Droughty	0.08						
GyB:									
Guyton	90	Very limited		Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Wetness	1.00	Wetness	1.00
		Wetness	1.00	Wetness	1.00				
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover: Rating class and limiting features	Value	Domestic grasses and legumes for food and cover: Rating class and limiting features	Value	Upland wild herbaceous plants: Rating class and limiting features	Value	Upland shrubs and vines: Rating class and limiting features	Value
HaC:									
Harleston----------	85	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.19	Wetness	0.19
		Wetness	0.19	Wetness	0.19				
		Droughty	0.08						
JaC:									
Japany-------------	95	Very limited		Very limited		Very limited		Very limited	
		Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Percs slowly	0.48	Percs slowly	0.48				
LaB:									
Laneburg-----------	85	Very limited		Very limited		Very limited		Very limited	
		Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Too clayey	0.70	Too clayey	0.70
		Too clayey	0.70	Too clayey	0.70				
		Percs slowly	0.50	Percs slowly	0.50				
OuA:									
Ouachita-----------	85	Somewhat limited		Somewhat limited		Not limited		Not limited	
		Flooding	0.50	Flooding	0.50				
PkC:									
Pikeville----------	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Droughty	0.78						
Ps:									
Pits---------------	100	Not rated		Not rated		Not rated		Not rated	
PtC:									
Prescott-----------	85	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.75	Wetness	0.75
		Wetness	0.75	Wetness	0.75				

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland wild herbaceous plants		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
RsC:									
Rosalie	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Too sandy	0.50	Droughty	0.13
		Droughty	1.00	Too sandy	0.50	Droughty	0.13		
		Too sandy	0.50	Droughty	0.13				
RuB:									
Ruston	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Droughty	0.09						
SaB:									
Sacul	95	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Percs slowly	0.48	Percs slowly	0.48				
SaC:									
Sacul	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Percs slowly	0.48	Percs slowly	0.48				
SaD:									
Sacul	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Percs slowly	0.48	Percs slowly	0.48				
SaE:									
Sacul	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Slope	0.78	Slope	0.78				
		Percs slowly	0.48	Percs slowly	0.48				

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover: Rating class and limiting features	Value	Domestic grasses and legumes for food and cover: Rating class and limiting features	Value	Upland wild herbaceous plants: Rating class and limiting features	Value	Upland shrubs and vines: Rating class and limiting features	Value
SfC:									
Saffell	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Droughty	0.94	Too gravelly, cobbly, or stony	0.64				
		Too gravelly, cobbly, or stony	0.64						
SfD:									
Saffell	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Droughty	0.94	Too gravelly, cobbly, or stony	0.64				
		Too gravelly, cobbly, or stony	0.64						
SiB:									
Sardis	90	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.44	Wetness	0.44
		Flooding	0.50	Flooding	0.50				
		Wetness	0.44	Wetness	0.44				
SnB:									
Savannah	95	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.75	Wetness	0.75
		Wetness	0.75	Wetness	0.75				
		Droughty	0.48						
SnC:									
Savannah	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.75	Wetness	0.75
		Wetness	0.75	Wetness	0.75				
		Droughty	0.48						
SrB:									
Sawyer	95	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.75	Wetness	0.75
		Wetness	0.75	Wetness	0.75				

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover: Rating class and limiting features	Value	Domestic grasses and legumes for food and cover: Rating class and limiting features	Value	Upland wild herbaceous plants: Rating class and limiting features	Value	Upland shrubs and vines: Rating class and limiting features	Value
SrC:									
Sawyer	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Wetness	0.75	Wetness	0.75
		Wetness	0.75	Wetness	0.75				
StC:									
Smithdale	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
StD:									
Smithdale	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
StE:									
Smithdale	100	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Slope	0.78	Slope	0.78				
SuB:									
Smithton	85	Very limited		Very limited		Very limited		Very limited	
		Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
UnA:									
Una	90	Very limited		Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Wetness	1.00	Wetness	1.00
		Wetness	1.00	Wetness	1.00	Too clayey	0.57	Too clayey	0.57
		Percs slowly	1.00	Percs slowly	1.00				
		Too clayey	0.57	Too clayey	0.57				
UrA:									
Urbo	85	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Percs slowly	1.00	Percs slowly	1.00	Wetness	0.99	Wetness	0.99
		Wetness	0.99	Wetness	0.99				
		Flooding	0.50	Flooding	0.50				

Table 9a.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover: Rating class and limiting features	Value	Domestic grasses and legumes for food and cover: Rating class and limiting features	Value	Upland wild herbaceous plants: Rating class and limiting features	Value	Upland shrubs and vines: Rating class and limiting features	Value
W:									
Water	100	Not rated		Not rated		Not rated		Not rated	
WaC:									
Warnock	95	Very limited		Very limited		Not limited		Not limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00				
		Droughty	0.39						
WxC:									
Wilcox	95	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Too clayey	0.57	Too clayey	0.57
		Too clayey	0.57	Too clayey	0.57	Wetness	0.44	Wetness	0.44
		Percs slowly	0.50	Percs slowly	0.50				
		Wetness	0.44	Wetness	0.44				
WxD:									
Wilcox	100	Very limited		Very limited		Somewhat limited		Somewhat limited	
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00	Too clayey	0.57	Too clayey	0.57
		Too clayey	0.57	Too clayey	0.57	Wetness	0.44	Wetness	0.44
		Percs slowly	0.50	Percs slowly	0.50				
		Wetness	0.44	Wetness	0.44				

Table 9b.-Fish and Wildlife Habitat

(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	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:							
Adaton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
AmB:							
Amy	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
AnC:							
Angie	90	Somewhat limited		Not limited		Very limited	
		Depth to saturated zone	0.44			Growing season wetness	1.00
						Depth to saturated zone	0.44
BbA:							
Bibb	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
BoB:							
Bowie	95	Somewhat limited		Not limited		Very limited	
		Depth to saturated zone	0.22			Growing season wetness	1.00
						Depth to saturated zone	0.22
BoC:							
Bowie	100	Somewhat limited		Not limited		Very limited	
		Depth to saturated zone	0.22			Growing season wetness	1.00
						Depth to saturated zone	0.22
BrC:							
Briley	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.01	Droughty	0.01	Droughty	0.01
DaC:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.68	Droughty	0.68	Droughty	0.68
DaD:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.68	Droughty	0.68	Droughty	0.68

Table 9b.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DaE:							
Darden	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.68	Droughty	0.68	Droughty	0.68
DeC:							
DeAnn	92	Not limited		Not limited		Somewhat limited	
						Growing season wetness	0.50
GyB:							
Guyton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
HaC:							
Harleston	85	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.47	Depth to saturated zone	1.00
						Growing season wetness	0.50
JaC:							
Japany	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	0.50
LaB:							
Laneburg	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
OuA:							
Ouachita	85	Not limited		Not limited		Not limited	
PkC:							
Pikeville	100	Not limited		Not limited		Not limited	
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.86	Depth to saturated zone	1.00
						Growing season wetness	0.50
RsC:							
Rosalie	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.13	Droughty	0.13	Droughty	0.13
RuB:							
Ruston	100	Not limited		Not limited		Not limited	

Table 9b.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees: Rating class and limiting features	Value	Upland coniferous trees: Rating class and limiting features	Value	Upland mixed deciduous and coniferous trees: Rating class and limiting features	Value
SaB:							
Sacul	95	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Wetness	0.09	Growing season wetness	1.00
						Depth to saturated zone	0.99
SaC:							
Sacul	100	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Wetness	0.09	Growing season wetness	1.00
						Depth to saturated zone	0.99
SaD:							
Sacul	100	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Wetness	0.09	Growing season wetness	1.00
						Depth to saturated zone	0.99
SaE:							
Sacul	100	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Wetness	0.09	Growing season wetness	1.00
						Depth to saturated zone	0.99
SfC:							
Saffell	100	Not limited		Not limited		Not limited	
SfD:							
Saffell	100	Not limited		Not limited		Not limited	
SiB:							
Sardis	90	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.68	Depth to saturated zone	1.00
						Growing season wetness	1.00
SnB:							
Savannah	95	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.86	Depth to saturated zone	1.00
						Growing season wetness	1.00
SnC:							
Savannah	100	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.86	Depth to saturated zone	1.00
						Growing season wetness	1.00
SrB:							
Sawyer	95	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.86	Depth to saturated zone	1.00
						Growing season wetness	1.00

Table 9b.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees: Rating class and limiting features	Value	Upland coniferous trees: Rating class and limiting features	Value	Upland mixed deciduous and coniferous trees: Rating class and limiting features	Value
SrC:							
Sawyer	100	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.86	Depth to saturated zone	1.00
						Growing season wetness	1.00
StC:							
Smithdale	100	Not limited		Not limited		Not limited	
StD:							
Smithdale	100	Not limited		Not limited		Not limited	
StE:							
Smithdale	100	Not limited		Not limited		Not limited	
SuB:							
Smithton	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
UnA:							
Una	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Wetness	1.00	Depth to saturated zone	1.00
						Growing season wetness	1.00
UrA:							
Urbo	85	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.99	Depth to saturated zone	1.00
						Growing season wetness	1.00
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Wetness	0.09	Growing season wetness	1.00
						Depth to saturated zone	0.99
WxC:							
Wilcox	95	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.68	Depth to saturated zone	1.00
						Growing season wetness	1.00
WxD:							
Wilcox	100	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Wetness	0.68	Depth to saturated zone	1.00
						Growing season wetness	1.00

Table 9c.-Fish and Wildlife Habitat

(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	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:									
Adaton	90	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
AmB:									
Amy	95	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
AnC:									
Angie	90	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.56	Too dry	1.00	Too acid	0.78
		Infrequent flooding	1.00			Too acid	0.78	Too dry	0.56
								Seepage	0.56
								Slope	0.08
BbA:									
Bibb	95	Somewhat limited		Somewhat limited		Somewhat limited		Somewhat limited	
		Long flooding	0.50	Flooding	0.50	Too acid	0.78	Too acid	0.78
								Seepage	0.07
BoB:									
Bowie	95	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.78	Too dry	1.00	Too acid	0.78
		Infrequent flooding	1.00			Too acid	0.78	Too dry	0.78
								Seepage	0.76
BoC:									
Bowie	100	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.78	Too dry	1.00	Too acid	0.78
		Infrequent flooding	1.00			Too acid	0.78	Too dry	0.78
								Seepage	0.76
								Slope	0.32

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants: Rating class and limiting features	Value	Riparian shrubs, vines, and trees: Rating class and limiting features	Value	Freshwater wetland plants: Rating class and limiting features	Value	Irrigated freshwater wetland plants: Rating class and limiting features	Value
BrC:									
Briley	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.01	Too acid	0.78	Seepage	1.00
								Too acid	0.78
		Too sandy	0.50					Too sandy	0.50
								Slope	0.08
DaC:									
Darden	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.68	Too acid	0.78	Seepage	1.00
								Too acid	0.78
		Too sandy	0.50					Too sandy	0.50
								Slope	0.08
DaD:									
Darden	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.68	Too acid	0.78	Seepage	1.00
								Slope	1.00
		Too sandy	0.50					Too acid	0.78
								Too sandy	0.50
DaE:									
Darden	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.68	Too acid	0.78	Seepage	1.00
								Slope	1.00
		Too sandy	0.50					Too acid	0.78
								Too sandy	0.50
DeC:									
DeAnn	92	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00					Slope	0.32
GyB:									
Guyton	90	Somewhat limited		Somewhat limited		Somewhat limited		Somewhat limited	
		Long flooding	0.50	Flooding	0.50	Too acid	0.78	Too acid	0.78
								Seepage	0.07

Table 9c.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants: Rating class and limiting features	Value	Riparian shrubs, vines, and trees: Rating class and limiting features	Value	Freshwater wetland plants: Rating class and limiting features	Value	Irrigated freshwater wetland plants: Rating class and limiting features	Value
HaC:									
Harleston	85	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.99	Too acid	0.99
		Too dry	0.89			Too dry	0.89	Seepage	0.56
								Slope	0.08
JaC:									
Japany	95	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
		Too dry	0.02			Too dry	0.02	Slope	0.32
								Seepage	0.07
LaB:									
Laneburg	85	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
OuA:									
Ouachita	85	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
						Too acid	0.78	Too acid	0.78
								Seepage	0.07
PkC:									
Pikeville	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Slope	0.08
								Seepage	0.07
Ps:									
Pits	100	Not rated		Not rated		Not rated		Not rated	
PtC:									
Prescott	85	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.92	Too acid	0.92
		Too dry	0.53			Too dry	0.53	Seepage	0.01

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
RsC:									
Rosalie	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.13	Too acid	0.78	Seepage	1.00
								Too acid	0.78
		Too sandy	0.50					Too sandy	0.50
								Slope	0.08
RuB:									
Ruston	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
SaB:									
Sacul	95	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.01	Too dry	1.00	Too acid	0.78
		Infrequent flooding	1.00			Too acid	0.78	Seepage	0.07
								Too dry	0.01
SaC:									
Sacul	100	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.01	Too dry	1.00	Too acid	0.78
		Infrequent flooding	1.00			Too acid	0.78	Slope	0.32
								Seepage	0.07
								Too dry	0.01
SaD:									
Sacul	100	Very limited		Somewhat limited		Very limited		Very limited	
		Too dry	1.00	Too dry	0.01	Too dry	1.00	Slope	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
								Too dry	0.01
SaE:									
Sacul	100	Very limited		Somewhat limited		Very limited		Very limited	
		Too dry	1.00	Too dry	0.01	Too dry	1.00	Slope	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
								Too dry	0.01

Table 9c.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SfC:									
Saffell-------------	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.76
								Slope	0.32
SfD:									
Saffell-------------	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Slope	1.00
								Too acid	0.78
								Seepage	0.76
SiB:									
Sardis--------------	90	Somewhat limited		Not limited		Somewhat limited		Somewhat limited	
		Too dry	0.76			Too acid	0.78	Too acid	0.78
						Too dry	0.76	Seepage	0.07
SnB:									
Savannah------------	95	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
		Too dry	0.53			Too dry	0.53	Seepage	0.07
SnC:									
Savannah------------	100	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
						Too dry	0.53	Slope	0.32
		Too dry	0.53					Seepage	0.07
SrB:									
Sawyer--------------	95	Very limited		Not limited		Very limited		Very limited	
		Infrequent flooding	1.00			Too acid	1.00	Too acid	1.00
		Too dry	0.53			Too dry	0.53	Seepage	0.07
SrC:									
Sawyer--------------	100	Very limited		Not limited		Very limited		Very limited	
		Infrequent flooding	1.00			Too acid	1.00	Too acid	1.00
						Too dry	0.53	Slope	0.32
		Too dry	0.53					Seepage	0.07

Table 9c.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
StC:									
Smithdale-----------	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.76
								Slope	0.32
StD:									
Smithdale-----------	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Slope	1.00
								Too acid	0.78
								Seepage	0.76
StE:									
Smithdale-----------	100	Very limited		Very limited		Very limited		Very limited	
		Too dry	1.00	Too dry	1.00	Too dry	1.00	Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78	Slope	1.00
								Too acid	0.78
								Seepage	0.76
SuB:									
Smithton------------	85	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
								Seepage	0.07
UnA:									
Una-----------------	90	Somewhat limited		Somewhat limited		Somewhat limited		Somewhat limited	
		Long flooding	0.50	Flooding	0.50	Too acid	0.78	Too acid	0.78
UrA:									
Urbo----------------	85	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.78	Too acid	0.78
		Too dry	0.14			Too dry	0.14		
W:									
Water---------------	100	Not rated		Not rated		Not rated		Not rated	

Table 9c.-Fish and Wildlife Habitat--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WaC:									
Warnock-------------	95	Very limited		Somewhat limited		Very limited		Somewhat limited	
		Too dry	1.00	Too dry	0.01	Too dry	1.00	Too acid	0.99
		Infrequent flooding	1.00			Too acid	0.99	Seepage	0.76
								Slope	0.08
								Too dry	0.01
WxC:									
Wilcox--------------	95	Very limited		Not limited		Somewhat limited		Somewhat limited	
		Infrequent flooding	1.00			Too acid	0.99	Too acid	0.99
		Too dry	0.76			Too dry	0.76	Slope	0.08
WxD:									
Wilcox--------------	100	Very limited		Not limited		Somewhat limited		Very limited	
		Infrequent flooding	1.00			Too acid	0.99	Slope	1.00
		Too dry	0.76			Too dry	0.76	Too acid	0.99

Table 10a.-Building Site Development

(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
AdB:							
Adaton	90	Very limited		Very limited		Very limited	
		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
AmB:							
Amy	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
AnC:							
Angie	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to saturated zone	0.61		
BbA:							
Bibb	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
BoB:							
Bowie	95	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.47		
BoC:							
Bowie	100	Not limited		Somewhat limited		Somewhat limited	
				Depth to saturated zone	0.47	Slope	0.12
BrC:							
Briley	100	Not limited		Not limited		Not limited	
DaC:							
Darden	100	Not limited		Not limited		Not limited	
DaD:							
Darden	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
DaE:							
Darden	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
DeC:							
DeAnn	92	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to saturated zone	0.15	Slope	0.12

Table 10a.-Building Site Development--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
GyB:							
Guyton	90	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
HaC:							
Harleston	85	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
JaC:							
Japany	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
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
LaB:							
Laneburg	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
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
OuA:							
Ouachita	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
PkC:							
Pikeville	100	Not limited		Not limited		Not limited	
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
RsC:							
Rosalie	100	Not limited		Not limited		Not limited	
RuB:							
Ruston	100	Not limited		Not limited		Not limited	
SaB:							
Sacul	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
				Shrink-swell	0.50		
SaC:							
Sacul	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
				Shrink-swell	0.50	Slope	0.12

Table 10a.-Building Site Development--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
SaD:							
Sacul	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Depth to saturated zone	0.95	Slope	1.00
		Shrink-swell	0.50	Slope	0.63	Shrink-swell	0.50
				Shrink-swell	0.50		
SaE:							
Sacul	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
				Shrink-swell	0.50		
SfC:							
Saffell	100	Not limited		Not limited		Somewhat limited	
						Slope	0.12
SfD:							
Saffell	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
SiB:							
Sardis	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	1.00	Depth to saturated zone	0.07
SnB:							
Savannah	95	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
SnC:							
Savannah	100	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
						Slope	0.12
SrB:							
Sawyer	95	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
SrC:							
Sawyer	100	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
						Slope	0.12
StC:							
Smithdale	100	Not limited		Not limited		Somewhat limited	
						Slope	0.12
StD:							
Smithdale	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00

Table 10a.-Building Site Development--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
StE:							
Smithdale-----------	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
SuB:							
Smithton------------	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
UnA:							
Una-----------------	90	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
UrA:							
Urbo----------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
W:							
Water---------------	100	Not rated		Not rated		Not rated	
WaC:							
Warnock-------------	95	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.95		
WxC:							
Wilcox--------------	95	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Shrink-swell	1.00
		Depth to saturated zone	0.07	Shrink-swell	1.00	Depth to saturated zone	0.07
WxD:							
Wilcox--------------	100	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Shrink-swell	1.00	Shrink-swell	1.00
		Depth to saturated zone	0.07	Slope	0.63	Depth to saturated zone	0.07

Table 10b.-Building Site Development

(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		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:							
Adaton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50	Too clayey	0.01		
AmB:							
Amy	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
		Low strength	0.78	Cutbanks cave	0.10		
AnC:							
Angie	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.61		
		Shrink-swell	1.00	Too clayey	0.28		
				Cutbanks cave	0.10		
BbA:							
Bibb	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Depth to saturated zone	1.00
				Cutbanks cave	0.10		
BoB:							
Bowie	95	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.47		
				Cutbanks cave	0.10		
BoC:							
Bowie	100	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.47		
				Cutbanks cave	0.10		
BrC:							
Briley	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.01
DaC:							
Darden	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.69
DaD:							
Darden	100	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Droughty	0.69
				Slope	0.63	Slope	0.63
DaE:							
Darden	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.69

Table 10b.-Building Site Development--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
DeC:							
DeAnn	92	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Cutbanks cave	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	1.00		
				Depth to saturated zone	0.15		
GyB:							
Guyton	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Low strength	1.00	Cutbanks cave	0.10		
HaC:							
Harleston	85	Not limited		Very limited		Not limited	
				Depth to saturated zone	0.99		
				Cutbanks cave	0.10		
JaC:							
Japany	95	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Shrink-swell	1.00	Cutbanks cave	1.00		
		Depth to saturated zone	0.96	Too clayey	0.50		
LaB:							
Laneburg	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Cutbanks cave	1.00		
		Low strength	1.00	Too clayey	0.50		
OuA:							
Ouachita	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	0.22	Cutbanks cave	0.10		
PkC:							
Pikeville	100	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Shrink-swell	0.50	Cutbanks cave	1.00		
		Depth to saturated zone	0.19	Too clayey	0.50		
RsC:							
Rosalie	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.15
RuB:							
Ruston	100	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		

Table 10b.-Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SaB:							
Sacul---------------	95	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.95		
		Shrink-swell	0.50	Too clayey	0.28		
				Cutbanks cave	0.10		
SaC:							
Sacul---------------	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.95		
		Shrink-swell	0.50	Too clayey	0.28		
				Cutbanks cave	0.10		
SaD:							
Sacul---------------	100	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	0.95	Slope	0.63
		Slope	0.63	Slope	0.63		
		Shrink-swell	0.50	Too clayey	0.28		
SaE:							
Sacul---------------	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to saturated zone	0.95		
		Shrink-swell	0.50	Too clayey	0.28		
SfC:							
Saffell-------------	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Gravel content	0.41
SfD:							
Saffell-------------	100	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
				Slope	0.63	Gravel content	0.41
SiB:							
Sardis--------------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Flooding	0.80	Depth to saturated zone	0.03
		Depth to saturated zone	0.03	Cutbanks cave	0.10		
SnB:							
Savannah------------	95	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.19	Depth to saturated zone	1.00	Depth to saturated zone	0.19
				Cutbanks cave	0.10		
SnC:							
Savannah------------	100	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.19	Depth to saturated zone	1.00	Depth to saturated zone	0.19
				Cutbanks cave	0.10		

Table 10b.-Building Site Development--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
SrB:							
Sawyer	95	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Shrink-swell	0.50	Too clayey	0.12		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
SrC:							
Sawyer	100	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Shrink-swell	0.50	Too clayey	0.12		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
StC:							
Smithdale	100	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
StD:							
Smithdale	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
				Cutbanks cave	0.10		
StE:							
Smithdale	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
SuB:							
Smithton	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
				Cutbanks cave	0.10		
UnA:							
Una	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Low strength	1.00	Cutbanks cave	0.10		
UrA:							
Urbo	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Low strength	1.00	Flooding	0.60	Flooding	0.60
		Depth to saturated zone	0.75	Too clayey	0.12		
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.95		
				Cutbanks cave	0.10		

Table 10b.-Building Site Development--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
WxC:							
Wilcox--------------	95	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Shrink-swell	1.00	Cutbanks cave	1.00		
		Depth to saturated zone	0.03	Too clayey	0.88		
WxD:							
Wilcox--------------	100	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Slope	0.63
		Shrink-swell	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.03
		Slope	0.63	Too clayey	0.88		

Table 11a.-Sanitary Facilities

(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: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
AdB:					
Adaton	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
AmB:					
Amy	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
AnC:					
Angie	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
				Slope	0.32
BbA:					
Bibb	95	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	0.50	Seepage	0.50
BoB:					
Bowie	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
		Depth to saturated zone	0.94		
BoC:					
Bowie	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.68
				Seepage	0.50
		Depth to saturated zone	0.94		
BrC:					
Briley	100	Somewhat limited		Very limited	
		Slow water movement	0.50	Seepage	1.00
				Slope	0.32
DaC:					
Darden	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
		Filtering capacity	1.00		

Table 11a.-Sanitary Facilities--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
DaD:					
Darden	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.63		
DaE:					
Darden	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
DeC:					
DeAnn	92	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.40	Slope	0.68
		Depth to bedrock	0.25		
GyB:					
Guyton	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	1.00	Seepage	0.50
HaC:					
Harleston	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	1.00
				Slope	0.32
JaC:					
Japany	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68
LaB:					
Laneburg	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
OuA:					
Ouachita	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Seepage	0.50

Table 11a.-Sanitary Facilities--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
PkC:					
Pikeville	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.72	Seepage	0.50
				Slope	0.32
Ps:					
Pits	100	Not rated		Not rated	
PtC:					
Prescott	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to saturated zone	0.75
		Depth to saturated zone	1.00	Slope	0.08
RsC:					
Rosalie	100	Somewhat limited		Very limited	
		Slow water movement	0.50	Seepage	1.00
				Slope	0.32
RuB:					
Ruston	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
SaB:					
Sacul	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
SaC:					
Sacul	100	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68
SaD:					
Sacul	100	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.63		
SaE:					
Sacul	100	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00		
SfC:					
Saffell	100	Somewhat limited		Very limited	
		Slow water movement	0.50	Seepage	1.00
				Slope	0.68

Table 11a.-Sanitary Facilities--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
SfD:					
Saffell-------------	100	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
SiB:					
Sardis--------------	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	0.50	Seepage	0.50
SnB:					
Savannah------------	95	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slow water movement	1.00	Seepage	0.50
SnC:					
Savannah------------	100	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slow water movement	1.00	Slope	0.68
				Seepage	0.50
SrB:					
Sawyer--------------	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to saturated zone	0.75
		Depth to saturated zone	1.00	Seepage	0.50
SrC:					
Sawyer--------------	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to saturated zone	0.75
		Depth to saturated zone	1.00	Slope	0.68
				Seepage	0.50
StC:					
Smithdale-----------	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.68
StD:					
Smithdale-----------	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Slow water movement	0.50		

Table 11a.-Sanitary Facilities--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
StE:					
Smithdale-----------	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
SuB:					
Smithton------------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
UnA:					
Una-----------------	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
UrA:					
Urbo----------------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
W:					
Water---------------	100	Not rated		Not rated	
WaC:					
Warnock-------------	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
WxC:					
Wilcox--------------	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.32
		Depth to bedrock	0.30		
WxD:					
Wilcox--------------	100	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.63		

Table 11b.-Sanitary Facilities

(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
AdB:							
Adaton	90	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	0.50			Too clayey	0.50
AmB:							
Amy	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
		Too clayey	0.50				
AnC:							
Angie	90	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				
BbA:							
Bibb	95	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		
BoB:							
Bowie	95	Not limited		Not limited		Not limited	
BoC:							
Bowie	100	Not limited		Not limited		Not limited	
BrC:							
Briley	100	Not limited		Very limited		Not limited	
				Seepage	1.00		
DaC:							
Darden	100	Very limited		Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	0.50			Too sandy	0.50
DaD:							
Darden	100	Very limited		Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Slope	0.63	Slope	0.63	Slope	0.63
		Too sandy	0.50			Too sandy	0.50
DaE:							
Darden	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	0.50			Too sandy	0.50

Table 11b.-Sanitary Facilities--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
DeC:							
DeAnn---------------	92	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
						Hard to compact	1.00
		Depth to bedrock	1.00				
		Too clayey	1.00				
GyB:							
Guyton--------------	90	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		
HaC:							
Harleston-----------	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.47
JaC:							
Japany--------------	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
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
LaB:							
Laneburg------------	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			Too clayey	1.00
						Hard to compact	1.00
OuA:							
Ouachita------------	85	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
PkC:							
Pikeville-----------	100	Not limited		Not limited		Somewhat limited	
						Gravel content	0.43
Ps:							
Pits----------------	100	Not rated		Not rated		Not rated	
PtC:							
Prescott------------	85	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
RsC:							
Rosalie-------------	100	Not limited		Very limited		Not limited	
				Seepage	1.00		
RuB:							
Ruston--------------	100	Not limited		Not limited		Not limited	
SaB:							
Sacul---------------	95	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
						Depth to saturated zone	0.09
		Too clayey	0.50				

Table 11b.-Sanitary Facilities--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
SaC:							
Sacul---------------	100	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			Depth to saturated zone	0.09
SaD:							
Sacul---------------	100	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	0.63
		Slope	0.63	Slope	0.63	Too clayey	0.50
		Too clayey	0.50			Depth to saturated zone	0.09
SaE:							
Sacul---------------	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50			Depth to saturated zone	0.09
SfC:							
Saffell-------------	100	Somewhat limited		Not limited		Very limited	
		Too clayey	0.50			Gravel content	0.99
						Too clayey	0.50
SfD:							
Saffell-------------	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Gravel content	0.99
		Too clayey	0.50			Slope	0.63
						Too clayey	0.50
SiB:							
Sardis--------------	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.68
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
SnB:							
Savannah------------	95	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
SnC:							
Savannah------------	100	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
SrB:							
Sawyer--------------	95	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
		Too clayey	0.50			Too clayey	0.50
SrC:							
Sawyer--------------	100	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
		Too clayey	0.50			Too clayey	0.50

Table 11b.-Sanitary Facilities--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
StC:							
Smithdale	100	Very limited		Not limited		Not limited	
		Seepage, bottom layer	1.00				
StD:							
Smithdale	100	Very limited		Somewhat limited		Somewhat limited	
		Seepage, bottom layer	1.00	Slope	0.63	Slope	0.63
		Slope	0.63				
StE:							
Smithdale	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00				
SuB:							
Smithton	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
UnA:							
Una	90	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	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
UrA:							
Urbo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Hard to compact	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.99
		Too clayey	0.50			Too clayey	0.50
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Somewhat limited		Not limited		Somewhat limited	
		Depth to saturated zone	0.44			Depth to saturated zone	0.09
WxC:							
Wilcox	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Depth to bedrock	1.00			Hard to compact	1.00
		Too clayey	1.00			Depth to saturated zone	0.68
WxD:							
Wilcox	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Depth to bedrock	1.00	Slope	0.63	Hard to compact	1.00
		Too clayey	1.00			Depth to saturated zone	0.68

Table 12a.-Construction and Excavating Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
AdB:					
Adaton	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
AmB:					
Amy	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
AnC:					
Angie	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
BbA:					
Bibb	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
BoB:					
Bowie	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
BoC:					
Bowie	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
BrC:					
Briley	100	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.07
DaC:					
Darden	100	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.02
DaD:					
Darden	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.02
DaE:					
Darden	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.02
DeC:					
DeAnn	92	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 12a.-Construction and Excavating Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
GyB:					
Guyton--------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HaC:					
Harleston-----------	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.04
JaC:					
Japany--------------	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
LaB:					
Laneburg------------	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
OuA:					
Ouachita------------	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
PkC:					
Pikeville-----------	100	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Ps:					
Pits----------------	100	Not rated		Not rated	
PtC:					
Prescott------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
RsC:					
Rosalie-------------	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.07
RuB:					
Ruston--------------	100	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.03
SaB:					
Sacul---------------	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
SaC:					
Sacul---------------	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 12a.-Construction and Excavating Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
SaD:					
Sacul	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SaE:					
Sacul	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SfC:					
Saffell	100	Fair		Fair	
		Bottom layer	0.06	Thickest layer	0.00
		Thickest layer	0.25	Bottom layer	0.04
SfD:					
Saffell	100	Fair		Fair	
		Bottom layer	0.06	Thickest layer	0.00
		Thickest layer	0.25	Bottom layer	0.04
SiB:					
Sardis	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
SnB:					
Savannah	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SnC:					
Savannah	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SrB:					
Sawyer	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SrC:					
Sawyer	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
StC:					
Smithdale	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
StD:					
Smithdale	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
StE:					
Smithdale	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03

Table 12a.-Construction and Excavating Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
SuB:					
Smithton------------	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.01
UnA:					
Una-----------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UrA:					
Urbo----------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
W:					
Water---------------	100	Not rated		Not rated	
WaC:					
Warnock-------------	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
WxC:					
Wilcox--------------	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
WxD:					
Wilcox--------------	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 12b.-Construction and Excavating Materials

(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	Potential source of topsoil: Rating class and limiting features	Value
AdB:							
Adaton	90	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.00
		Too acid	0.32	Wetness depth	0.00	Too clayey	0.57
		Water erosion	0.90	Shrink-swell	0.87	Too acid	0.88
AmB:							
Amy	95	Fair		Poor		Poor	
		Organic matter content low	0.12	Wetness depth	0.00	Wetness depth	0.00
		Too acid	0.32	Low strength	0.22	Too acid	0.88
		Water erosion	0.90				
AnC:							
Angie	90	Fair		Poor		Fair	
		Too clayey	0.05	Low strength	0.00	Too clayey	0.03
		Organic matter content low	0.12	Shrink-swell	0.23	Too acid	0.88
		Too acid	0.32				
BbA:							
Bibb	95	Fair		Poor		Poor	
		Too acid	0.50	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88			Too acid	0.88
		Water erosion	0.99			Rock fragments	0.88
BoB:							
Bowie	95	Fair		Good		Fair	
		Too acid	0.32			Too acid	0.88
		Organic matter content low	0.60				
BoC:							
Bowie	100	Fair		Good		Fair	
		Too acid	0.32			Too acid	0.88
		Organic matter content low	0.60				
BrC:							
Briley	100	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.88
		Organic matter content low	0.12				
		Too acid	0.50				
DaC:							
Darden	100	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.45
		Organic matter content low	0.12			Too acid	0.88
		Too sandy	0.45				

Table 12b.-Construction and Excavating Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DaD:							
Darden---------------	100	Poor		Good		Fair	
		Wind erosion	0.00			Slope	0.37
		Organic matter content low	0.12			Too sandy	0.45
		Too sandy	0.45			Too acid	0.88
DaE:							
Darden---------------	100	Poor		Poor		Poor	
		Wind erosion	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12			Too sandy	0.45
		Too sandy	0.45			Too acid	0.88
DeC:							
DeAnn---------------	92	Poor		Poor		Poor	
		Too clayey	0.00	Shrink-swell	0.00	Too clayey	0.00
		Organic matter content low	0.50	Low strength	0.00		
		Water erosion	0.99				
GyB:							
Guyton---------------	90	Fair		Poor		Poor	
		Too acid	0.32	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88	Low strength	0.00	Too acid	0.88
		Water erosion	0.90				
HaC:							
Harleston-----------	85	Fair		Fair		Fair	
		Too acid	0.12	Wetness depth	0.89	Too acid	0.88
		Organic matter content low	0.12			Wetness depth	0.89
JaC:							
Japany---------------	95	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Wetness depth	0.02
		Organic matter content low	0.12	Wetness depth	0.02	Too clayey	0.05
		Too acid	0.32	Shrink-swell	0.03	Too acid	0.88
LaB:							
Laneburg------------	85	Poor		Poor		Poor	
		Too clayey	0.00	Shrink-swell	0.00	Wetness depth	0.00
		Organic matter content low	0.12	Wetness depth	0.00	Too clayey	0.00
		Too acid	0.32	Low strength	0.00	Too acid	0.92
OuA:							
Ouachita------------	85	Fair		Good		Fair	
		Too acid	0.32			Too acid	0.88
		Organic matter content low	0.88				
		Water erosion	0.99				

Table 12b.-Construction and Excavating Materials--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	Potential source of topsoil: Rating class and limiting features	Value
PkC:							
Pikeville-----------	100	Fair		Good		Poor	
		Organic matter content low	0.12			Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Rock fragments	0.72
		Water erosion	0.99			Too acid	0.88
Ps:							
Pits----------------	100	Not rated		Not rated		Not rated	
PtC:							
Prescott------------	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.53
		Too acid	0.20	Wetness depth	0.53	Too acid	0.76
		Water erosion	0.90	Shrink-swell	0.87		
RsC:							
Rosalie-------------	100	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.18
		Too sandy	0.18			Too acid	0.88
		Organic matter content low	0.18				
RuB:							
Ruston--------------	100	Fair		Good		Fair	
		Organic matter content low	0.12			Too acid	0.88
		Too acid	0.32				
SaB:							
Sacul---------------	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.69	Too acid	0.88
		Too acid	0.32				
SaC:							
Sacul---------------	100	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.69	Too acid	0.88
		Too acid	0.32				
SaD:							
Sacul---------------	100	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.69	Slope	0.37
						Too acid	0.88
		Too acid	0.32				
SaE:							
Sacul---------------	100	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.69	Too acid	0.88
		Too acid	0.32				

Table 12b.-Construction and Excavating Materials--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	Potential source of topsoil: Rating class and limiting features	Value
SfC:							
Saffell	100	Fair		Good		Poor	
		Organic matter content low	0.12			Hard to reclaim (rock fragments)	0.00
		Too acid	0.32			Rock fragments	0.00
						Too acid	0.88
SfD:							
Saffell	100	Fair		Good		Poor	
		Organic matter content low	0.12			Hard to reclaim (rock fragments)	0.00
		Too acid	0.32			Rock fragments	0.00
						Slope	0.37
SiB:							
Sardis	90	Fair		Poor		Fair	
		Too acid	0.32	Low strength	0.00	Wetness depth	0.76
		Organic matter content low	0.88	Wetness depth	0.76	Too acid	0.88
		Water erosion	0.99				
SnB:							
Savannah	95	Fair		Fair		Fair	
		Organic matter content low	0.12	Wetness depth	0.53	Wetness depth	0.53
						Too acid	0.88
		Too acid	0.50				
SnC:							
Savannah	100	Fair		Fair		Fair	
		Organic matter content low	0.12	Wetness depth	0.53	Wetness depth	0.53
						Too acid	0.88
		Too acid	0.50				
SrB:							
Sawyer	95	Fair		Poor		Fair	
		Too acid	0.03	Low strength	0.00	Too acid	0.32
		Organic matter content low	0.88	Wetness depth	0.53	Wetness depth	0.53
				Shrink-swell	0.91		
		Water erosion	0.99				
SrC:							
Sawyer	100	Fair		Poor		Fair	
		Too acid	0.03	Low strength	0.00	Too acid	0.32
		Organic matter content low	0.88	Wetness depth	0.53	Wetness depth	0.53
				Shrink-swell	0.91		
		Water erosion	0.99				
StC:							
Smithdale	100	Fair		Good		Fair	
		Organic matter content low	0.12			Too acid	0.88
		Too acid	0.32				
StD:							
Smithdale	100	Fair		Good		Fair	
		Organic matter content low	0.12			Slope	0.37
						Too acid	0.88
		Too acid	0.32				

Table 12b.-Construction and Excavating Materials--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	Potential source of topsoil: Rating class and limiting features	Value
StE:							
Smithdale-----------	100	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
						Too acid	0.88
		Too acid	0.32				
SuB:							
Smithton------------	85	Fair		Poor		Poor	
		Too acid	0.32	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88			Too acid	0.88
UnA:							
Una-----------------	90	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.12	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.12	Too acid	0.88
		Too acid	0.32				
UrA:							
Urbo----------------	85	Fair		Poor		Fair	
		Too clayey	0.05	Low strength	0.00	Too clayey	0.03
		Organic matter content low	0.12	Wetness depth	0.14	Wetness depth	0.14
				Shrink-swell	0.89	Too acid	0.88
		Too acid	0.32				
W:							
Water---------------	100	Not rated		Not rated		Not rated	
WaC:							
Warnock-------------	95	Fair		Good		Fair	
		Too acid	0.12			Too acid	0.59
		Organic matter content low	0.12				
WxC:							
Wilcox--------------	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.12	Wetness depth	0.76
		Organic matter content low	0.50	Wetness depth	0.76	Too acid	0.88
WxD:							
Wilcox--------------	100	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.12	Slope	0.37
		Organic matter content low	0.50	Wetness depth	0.76	Wetness depth	0.76

Table 13.-Water Managment

(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		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
AdB:							
Adaton	90	Not limited		Very limited		Somewhat limited	
				Depth to saturated zone	1.00	Slow refill	0.30
						Cutbanks cave	0.10
				Piping	0.02		
AmB:							
Amy	95	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.03	Depth to saturated zone	1.00	Slow refill	0.30
						Cutbanks cave	0.10
				Piping	1.00		
AnC:							
Angie	90	Somewhat limited		Not limited		Very limited	
		Slope	0.08			Slow refill	1.00
						Depth to saturated zone	0.81
						Cutbanks cave	0.10
BbA:							
Bibb	95	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
						Cutbanks cave	0.10
				Piping	1.00		
				Seepage	0.03		
BoB:							
Bowie	95	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.19	Depth to water	1.00
BoC:							
Bowie	100	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.19	Depth to water	1.00
		Slope	0.32				
BrC:							
Briley	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.07	Depth to water	1.00
		Slope	0.08				
DaC:							
Darden	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.02	Depth to water	1.00
		Slope	0.08				
DaD:							
Darden	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.02	Depth to water	1.00
		Slope	1.00				
DaE:							
Darden	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.02	Depth to water	1.00
		Slope	1.00				

Table 13.-Water Managment--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
DeC:							
DeAnn	92	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.32	Hard to pack	0.94	Depth to water	1.00
						Slow refill	1.00
GyB:							
Guyton	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.03	Depth to saturated zone	1.00	Slow refill	0.30
						Cutbanks cave	0.10
				Piping	1.00		
HaC:							
Harleston	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.86	Slow refill	0.30
		Slope	0.08			Cutbanks cave	0.10
				Seepage	0.04	Depth to saturated zone	0.06
JaC:							
Japany	95	Somewhat limited		Very limited		Very limited	
		Slope	0.32	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.03				
				Hard to pack	0.63		
LaB:							
Laneburg	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		
OuA:							
Ouachita	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
PkC:							
Pikeville	100	Somewhat limited		Not limited		Very limited	
		Seepage	0.70			Depth to water	1.00
		Slope	0.08				
Ps:							
Pits	100	Not rated		Not rated		Not rated	
PtC:							
Prescott	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.03	Depth to saturated zone	0.99	Depth to water	1.00
RsC:							
Rosalie	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.07	Depth to water	1.00
		Slope	0.08				
RuB:							
Ruston	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
				Seepage	0.03		

Table 13.-Water Managment--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
SaB:							
Sacul	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.03	Depth to saturated zone	0.43	Slow refill	0.97
				Piping	0.06	Depth to saturated zone	0.25
						Cutbanks cave	0.10
SaC:							
Sacul	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.32	Depth to saturated zone	0.43	Slow refill	0.97
		Seepage	0.03	Piping	0.06	Depth to saturated zone	0.25
						Cutbanks cave	0.10
SaD:							
Sacul	100	Very limited		Somewhat limited		Somewhat limited	
		Slope	1.00	Depth to saturated zone	0.43	Slow refill	0.97
		Seepage	0.03	Piping	0.06	Depth to saturated zone	0.25
						Cutbanks cave	0.10
SaE:							
Sacul	100	Very limited		Somewhat limited		Somewhat limited	
		Slope	1.00	Depth to saturated zone	0.43	Slow refill	0.97
		Seepage	0.03	Piping	0.06	Depth to saturated zone	0.25
						Cutbanks cave	0.10
SfC:							
Saffell	100	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Seepage	0.25	Depth to water	1.00
		Slope	0.32				
SfD:							
Saffell	100	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.25	Depth to water	1.00
		Seepage	0.70				
SiB:							
Sardis	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Piping	0.99	Slow refill	0.30
				Depth to saturated zone	0.95	Cutbanks cave	0.10
						Depth to saturated zone	0.02
SnB:							
Savannah	95	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	0.99	Depth to water	1.00
				Piping	0.96		
SnC:							
Savannah	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.32	Piping	0.96		

Table 13.-Water Managment--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
SrB:							
Sawyer	95	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	0.99	Depth to water	1.00
				Piping	0.23		
SrC:							
Sawyer	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.32				
				Piping	0.23		
StC:							
Smithdale	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.32	Seepage	0.03		
StD:							
Smithdale	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.03		
StE:							
Smithdale	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.03		
SuB:							
Smithton	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.03	Depth to saturated zone	1.00	Slow refill	0.30
						Cutbanks cave	0.10
				Piping	1.00		
				Seepage	0.01		
UnA:							
Una	90	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
						Cutbanks cave	0.10
				Hard to pack	0.50		
UrA:							
Urbo	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
						Cutbanks cave	0.10
				Hard to pack	0.24		
W:							
Water	100	Not rated		Not rated		Not rated	
WaC:							
Warnock	95	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.99	Depth to water	1.00
		Slope	0.08	Depth to saturated zone	0.43		

Table 13.-Water Managment--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
WxC:							
Wilcox	95	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Hard to pack	0.99	Slow refill	1.00
				Depth to saturated zone	0.95	Cutbanks cave	0.10
						Depth to saturated zone	0.02
WxD:							
Wilcox	100	Very limited		Very limited		Very limited	
		Slope	1.00	Hard to pack	0.99	Slow refill	1.00
				Depth to saturated zone	0.95	Cutbanks cave	0.10
						Depth to saturated zone	0.02

Table 14a.-Agricultural Waste 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	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AdB:					
Adaton	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Runoff	0.40	Too acid	0.77
AmB:					
Amy	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Too acid	0.99
		Too acid	0.50	Slow water movement	0.37
AnC:					
Angie	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
BbA:					
Bibb	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Too acid	0.50	Too acid	0.99
BoB:					
Bowie	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Too acid	0.91
		Too acid	0.32	Slow water movement	0.37
BoC:					
Bowie	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Too acid	0.91
		Too acid	0.32	Slow water movement	0.37
BrC:					
Briley	100	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Too acid	0.22	Too acid	0.77
DaC:					
Darden	100	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.77
		Too acid	0.22	Droughty	0.02

Table 14a.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
DaD:					
Darden	100	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Slope	0.63	Too acid	0.77
		Leaching	0.45	Slope	0.63
DaE:					
Darden	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.77
DeC:					
DeAnn	92	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Runoff	0.40		
GyB:					
Guyton	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.50	Too acid	0.77
HaC:					
Harleston	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Too acid	0.22	Too acid	0.77
JaC:					
Japany	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff	0.40	Too acid	0.67
LaB:					
Laneburg	85	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.43	Too acid	0.99
OuA:					
Ouachita	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.50	Too acid	0.91
		Too acid	0.32	Slow water movement	0.37

Table 14a.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
PkC:					
Pikeville-----------	100	Somewhat limited		Somewhat limited	
		Low adsorption	0.26	Too acid	0.77
		Too acid	0.22	Low adsorption	0.03
Ps:					
Pits----------------	100	Not rated		Not rated	
PtC:					
Prescott------------	85	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.43	Too acid	0.99
RsC:					
Rosalie-------------	100	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Too acid	0.22	Too acid	0.77
RuB:					
Ruston--------------	100	Somewhat limited		Somewhat limited	
		Too acid	0.22	Too acid	0.77
SaB:					
Sacul---------------	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.43	Too acid	0.77
		Too acid	0.22	Depth to saturated zone	0.43
SaC:					
Sacul---------------	100	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.43	Too acid	0.77
		Too acid	0.22	Depth to saturated zone	0.43
SaD:					
Sacul---------------	100	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Slope	0.63	Too acid	0.77
		Depth to saturated zone	0.43	Slope	0.63
SaE:					
Sacul---------------	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.43	Too acid	0.77

Table 14a.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
SfC:					
Saffell-------------	100	Somewhat limited		Somewhat limited	
		Too acid	0.22	Too acid	0.77
SfD:					
Saffell-------------	100	Somewhat limited		Somewhat limited	
		Slope	0.63	Too acid	0.77
		Too acid	0.22	Slope	0.63
SiB:					
Sardis--------------	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95
		Too acid	0.18	Too acid	0.67
SnB:					
Savannah------------	95	Very limited		Very limited	
		Depth to saturated zone	0.99	Too acid	0.99
		Slow water movement	0.50	Depth to saturated zone	0.99
		Too acid	0.50	Slow water movement	0.37
SnC:					
Savannah------------	100	Very limited		Very limited	
		Depth to saturated zone	0.99	Too acid	0.99
		Slow water movement	0.50	Depth to saturated zone	0.99
		Too acid	0.50	Slow water movement	0.37
SrB:					
Sawyer--------------	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.43	Too acid	0.99
SrC:					
Sawyer--------------	100	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.43	Too acid	0.99
StC:					
Smithdale-----------	100	Somewhat limited		Somewhat limited	
		Too acid	0.22	Too acid	0.77
		Low adsorption	0.01		
StD:					
Smithdale-----------	100	Somewhat limited		Somewhat limited	
		Slope	0.63	Too acid	0.77
		Too acid	0.22	Slope	0.63
		Low adsorption	0.01		

Table 14a.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
StE:					
Smithdale-----------	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.22	Too acid	0.77
		Low adsorption	0.01		
SuB:					
Smithton------------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Too acid	0.77
		Runoff	0.40	Slow water movement	0.37
UnA:					
Una-----------------	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
UrA:					
Urbo----------------	85	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00
W:					
Water---------------	100	Not rated		Not rated	
WaC:					
Warnock-------------	95	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43
WxC:					
Wilcox--------------	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.95	Low adsorption	1.00
		Too acid	0.43	Too acid	0.99
WxD:					
Wilcox--------------	100	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.95	Low adsorption	1.00
		Slope	0.63	Too acid	0.99

Table 14b.-Agricultural Waste 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	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
AdB:					
Adaton	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.77	Too acid	0.77
AmB:					
Amy	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.99	Seepage	1.00
		Slow water movement	0.37	Too acid	0.99
AnC:					
Angie	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Too steep for surface application	0.08		
BbA:					
Bibb	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Too acid	0.99	Seepage	1.00
BoB:					
Bowie	95	Somewhat limited		Very limited	
		Too acid	0.91	Seepage	1.00
		Slow water movement	0.37	Too acid	0.91
BoC:					
Bowie	100	Somewhat limited		Very limited	
		Too acid	0.91	Seepage	1.00
		Slow water movement	0.37	Too acid	0.91
		Too steep for surface application	0.32		
BrC:					
Briley	100	Very limited		Very limited	
		Filtering capacity	0.99	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Too steep for surface application	0.08		

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
DaC:					
Darden	100	Very limited		Very limited	
		Filtering capacity	0.99	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Too steep for surface application	0.08		
DaD:					
Darden	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Filtering capacity	0.99	Too steep for surface application	1.00
		Too steep for sprinkler application	0.78	Too acid	0.77
DaE:					
Darden	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Filtering capacity	0.99	Too acid	0.77
DeC:					
DeAnn	92	Very limited		Not limited	
		Slow water movement	1.00		
		Too steep for surface application	0.32		
GyB:					
Guyton	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Too acid	0.77	Seepage	1.00
HaC:					
Harleston	85	Somewhat limited		Very limited	
		Depth to saturated zone	0.86	Seepage	1.00
		Too acid	0.77	Depth to saturated zone	0.76
		Too steep for surface application	0.08	Too acid	0.77

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
JaC:					
Japany	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67
LaB:					
Laneburg	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.99
		Too acid	0.99		
OuA:					
Ouachita	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Too acid	0.91	Seepage	1.00
		Slow water movement	0.37	Too acid	0.91
PkC:					
Pikeville	100	Somewhat limited		Very limited	
		Too acid	0.77	Seepage	1.00
		Low adsorption	0.26	Too acid	0.77
		Too steep for surface application	0.08	Low adsorption	0.26
Ps:					
Pits	100	Not rated		Not rated	
PtC:					
Prescott	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Too acid	0.99
		Too acid	0.99	Seepage	0.62
RsC:					
Rosalie	100	Very limited		Very limited	
		Filtering capacity	0.99	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Too steep for surface application	0.08		
RuB:					
Ruston	100	Somewhat limited		Very limited	
		Too acid	0.77	Seepage	1.00
				Too acid	0.77

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
SaB:					
Sacul---------------	95	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Depth to saturated zone	0.43	Depth to saturated zone	0.43
SaC:					
Sacul---------------	100	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.77	Too acid	0.77
		Depth to saturated zone	0.43	Depth to saturated zone	0.43
SaD:					
Sacul---------------	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	0.78	Too acid	0.77
SaE:					
Sacul---------------	100	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Slow water movement	1.00	Too acid	0.77
SfC:					
Saffell-------------	100	Somewhat limited		Very limited	
		Too acid	0.77	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.77
SfD:					
Saffell-------------	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.78	Too steep for surface application	1.00
		Too acid	0.77	Too acid	0.77

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
SiB:					
Sardis	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.95	Seepage	1.00
		Too acid	0.67	Depth to saturated zone	0.95
SnB:					
Savannah	95	Very limited		Very limited	
		Too acid	0.99	Seepage	1.00
		Depth to saturated zone	0.99	Too acid	0.99
		Slow water movement	0.37	Depth to saturated zone	0.99
SnC:					
Savannah	100	Very limited		Very limited	
		Too acid	0.99	Seepage	1.00
		Depth to saturated zone	0.99	Too acid	0.99
		Slow water movement	0.37	Depth to saturated zone	0.99
SrB:					
Sawyer	95	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.99	Too acid	0.99
SrC:					
Sawyer	100	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.99	Too acid	0.99
StC:					
Smithdale	100	Somewhat limited		Very limited	
		Too acid	0.77	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.77
		Low adsorption	0.01	Low adsorption	0.01
StD:					
Smithdale	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.78	Too steep for surface application	1.00
		Too acid	0.77	Too acid	0.77

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
StE:					
Smithdale	100	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.77	Too acid	0.77
SuB:					
Smithton	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.77	Seepage	1.00
		Slow water movement	0.37	Too acid	0.77
UnA:					
Una	90	Very limited		Very limited	
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Too level	0.50
UrA:					
Urbo	85	Very limited		Very limited	
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.77	Too acid	0.77
W:					
Water	100	Not rated		Not rated	
WaC:					
Warnock	95	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Depth to saturated zone	0.43	Too acid	1.00
		Too steep for surface application	0.08	Depth to saturated zone	0.43
WxC:					
Wilcox	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.99
		Too acid	0.99	Depth to saturated zone	0.95
		Depth to saturated zone	0.95		

Table 14b.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
WxD:					
Wilcox--------------	100	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Too acid	0.99
		Too acid	0.99	Depth to saturated zone	0.95

Table 14c.-Agricultural Waste 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	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
AdB:					
Adaton	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
				Too acid	0.77
AmB:					
Amy	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.99
				Slow water movement	0.26
AnC:					
Angie	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Too acid	0.77
				Too steep for surface application	0.08
BbA:					
Bibb	95	Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.99
BoB:					
Bowie	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.91
				Slow water movement	0.26
BoC:					
Bowie	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.91
		Slope	0.12	Too steep for surface application	0.32
				Slow water movement	0.26

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Rapid infiltration of wastewater: Value	Slow rate treatment of wastewater: Rating class and limiting features	Slow rate treatment of wastewater: Value
BrC:					
Briley	100	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	0.99
				Too acid	0.77
				Too steep for surface application	0.08
DaC:					
Darden	100	Not limited		Very limited	
				Filtering capacity	0.99
				Too acid	0.77
				Too steep for surface application	0.08
DaD:					
Darden	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
				Too steep for sprinkler irrigation	1.00
				Filtering capacity	0.99
DaE:					
Darden	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
				Too steep for sprinkler irrigation	1.00
				Filtering capacity	0.99
DeC:					
DeAnn	92	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Too steep for surface application	0.32
		Depth to bedrock	1.00		
GyB:					
Guyton	90	Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Too acid	0.77

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
HaC:					
Harleston-----------	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Slow water movement	1.00	Too acid	0.77
		Too acid	0.14	Too steep for surface application	0.08
JaC:					
Japany--------------	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Slope	0.12	Too acid	0.67
LaB:					
Laneburg------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
				Too acid	0.99
OuA:					
Ouachita------------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.91
				Slow water movement	0.26
PkC:					
Pikeville-----------	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.77
				Low adsorption	0.26
				Too steep for surface application	0.08
Ps:					
Pits----------------	100	Not rated		Not rated	
PtC:					
Prescott------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Too acid	0.99
		Too acid	0.21	Slow water movement	0.96
RsC:					
Rosalie-------------	100	Very limited		Very limited	
		Slow water movement	1.00	Filtering capacity	0.99
				Too acid	0.77
				Too steep for surface application	0.08

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
RuB:					
Ruston	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.77
SaB:					
Sacul	95	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Too acid	0.77
				Depth to saturated zone	0.43
SaC:					
Sacul	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.96
		Depth to saturated zone	1.00	Too acid	0.77
		Slope	0.12	Depth to saturated zone	0.43
SaD:					
Sacul	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
SaE:					
Sacul	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Depth to saturated zone	1.00	Slow water movement	0.96
SfC:					
Saffell	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.77
		Slope	0.12	Too steep for surface application	0.32
SfD:					
Saffell	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.77

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
SiB:					
Sardis	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.95
		Slow water movement	1.00	Too acid	0.67
SnB:					
Savannah	95	Very limited		Very limited	
		Slow water movement	1.00	Too acid	0.99
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
				Slow water movement	0.26
SnC:					
Savannah	100	Very limited		Very limited	
		Slow water movement	1.00	Too acid	0.99
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Slope	0.12	Too steep for surface application	0.32
SrB:					
Sawyer	95	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Too acid	0.99
		Too acid	0.42	Slow water movement	0.96
SrC:					
Sawyer	100	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Too acid	0.99
		Too acid	0.42	Slow water movement	0.96
StC:					
Smithdale	100	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.77
		Slope	0.12	Too steep for surface application	0.32
				Low adsorption	0.01
StD:					
Smithdale	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.77

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
StE:					
Smithdale-----------	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.77
SuB:					
Smithton------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.77
				Slow water movement	0.26
UnA:					
Una-----------------	90	Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
UrA:					
Urbo----------------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Flooding	0.60	Too acid	0.77
W:					
Water---------------	100	Not rated		Not rated	
WaC:					
Warnock-------------	95	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.43
		Too acid	0.14	Too steep for surface application	
WxC:					
Wilcox--------------	95	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Too acid	0.99
		Depth to bedrock	1.00	Depth to saturated zone	0.95

Table 14c.-Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
WxD:					
Wilcox--------------	100	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Too steep for sprinkler irrigation	1.00

Table 15.-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*	
AdB:												
Adaton----------	0-7	Silt loam	ML, CL, CL-ML	A-4	0	0	100	98-100	90-100	84-100	0-30	NP-10
	7-60	Silt loam, silty clay loam, silty clay	CL, CH	A-6, A-7	0	0	100	98-100	95-100	84-100	30-52	11-30
	60-80	Clay, silty clay loam, silty clay	CL, CH	A-6, A-7	0	0	100	98-100	95-100	84-100	30-52	11-30
AmB:												
Amy-------------	0-3	Silt loam	CL, CL-ML, ML	A-4	0	0	100	95-100	85-100	84-100	15-30	NP-10
	3-11	Silt loam, loam, very fine sandy loam	ML, CL-ML	A-4	0	0	100	95-100	85-100	50-90	15-30	NP-7
	11-40	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	95-100	85-100	70-95	25-35	8-14
	40-72	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	95-100	85-100	70-95	25-35	8-14
	72-80	Silt loam, silty clay loam, loam	CL-ML, CL	A-4, A-6	0	0	100	95-100	85-100	60-95	15-35	4-15
AnC:												
Angie-----------	0-7	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-2, A-4	0	0	95-100	90-100	60-85	30-65	10-28	NP-7
	7-14	Fine sandy loam	CL-ML, ML, SM, SC-SM	A-2, A-4	0	0	95-100	90-100	60-85	30-65	10-28	NP-7
	14-55	Silty clay loam, silty clay, clay	CH, CL	A-7-6	0	0	95-100	90-100	85-100	75-95	41-55	18-29
	55-80	Silty clay, clay	CL, CH	A-7-6	0	0	95-100	90-100	85-100	75-95	41-55	18-29
BbA:												
Bibb------------	0-3	Fine sandy loam	ML, SC-SM, SM, CL-ML	A-2, A-4	0	0-5	95-100	90-100	60-90	30-60	0-25	NP-7
	3-13	Fine sandy loam	CL-ML, SM, SC-SM, ML	A-2, A-4	0	0-5	95-100	90-100	60-90	30-60	0-25	NP-7
	13-80	Very fine sandy loam, sandy loam, loam, silt loam	SC-SM, CL-ML, ML, SM	A-2, A-4	0	0-5	80-100	70-100	50-100	30-90	0-30	NP-7

Table 15.-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*	
BoB:												
Bowie-----------	0-5	Fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0	0	97-100	94-100	90-100	30-55	0-25	NP-6
	5-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0	0	97-100	94-100	90-100	30-55	0-25	NP-6
	10-40	Sandy clay loam, clay loam, loam	CL, SC	A-4, A-6	0	0	90-100	87-100	80-100	40-72	20-40	8-25
	40-50	Sandy clay loam, clay loam, loam	CL, SC	A-2, A-4, A-6	0	0	80-100	70-100	65-100	34-77	20-40	8-25
	50-80	Sandy clay loam, clay loam, sandy clay	CL	A-6, A-7	0	0	95-100	90-100	75-100	51-80	31-49	14-30
BoC:												
Bowie-----------	0-5	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-2-4, A-4	0	0	97-100	94-100	90-100	30-55	0-25	NP-6
	5-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0	0	97-100	94-100	90-100	30-55	0-25	NP-6
	10-40	Sandy clay loam, clay loam, loam	CL, SC	A-4, A-6	0	0	90-100	87-100	80-100	40-72	20-40	8-25
	40-50	Sandy clay loam, clay loam, loam	CL, SC	A-2, A-4, A-6	0	0	80-100	70-100	65-100	34-77	20-40	8-25
	50-80	Sandy clay loam, clay loam, sandy clay	CL	A-6, A-7	0	0	95-100	90-100	75-100	51-80	31-49	14-30
BrC:												
Briley----------	0-4	Loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	80-100	17-45	16-25	NP-7
	4-21	Loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	97-100	95-100	80-100	17-45	16-25	NP-7
	21-80	Fine sandy loam, sandy clay loam	CL, SC	A-4, A-6	0	0	95-100	95-100	85-100	36-65	22-39	8-22
DaC:												
Darden----------	0-6	Loamy fine sand	SM	A-2, A-3	0	0	100	100	90-100	5-35	0-20	NP-3
	6-80	Loamy fine sand	SM	A-2	0	0	100	100	90-100	10-35	0-20	NP-3
DaD:												
Darden----------	0-6	Loamy fine sand	SM	A-2, A-3	0	0	100	100	90-100	5-35	0-20	NP-3
	6-80	Loamy fine sand	SM	A-2	0	0	100	100	90-100	10-35	0-20	NP-3
DaE:												
Darden----------	0-6	Loamy fine sand	SM	A-2, A-3	0	0	100	100	90-100	5-35	0-20	NP-3
	6-80	Loamy fine sand	SM	A-2	0	0	100	100	90-100	10-35	0-20	NP-3

Table 15.-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*	
DeC:												
DeAnn-----------	0-6	Clay	CH	A-7	0	0	100	100	95-100	90-95	50-68	23-37
	6-20	Clay	CH	A-7	0	0	100	100	95-100	95-98	51-80	25-48
	20-80	Clay	CH	A-7	0	0	100	100	95-100	95-98	55-80	30-45
GyB:												
Guyton----------	0-3	Silt loam	ML, CL-ML	A-4	0	0	100	100	95-100	65-90	0-27	NP-7
	3-14	Silt loam	CL-ML, ML	A-4	0	0	100	100	95-100	65-90	0-27	NP-7
	14-63	Silt loam, silty clay loam, clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	94-100	75-95	22-40	6-18
	63-80	Silt loam, silty clay loam, sandy clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	50-95	0-40	NP-18
HaC:												
Harleston-------	0-7	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	60-85	30-55	0-25	NP-7
	7-13	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-4, A-2	0	0	90-100	85-100	60-85	30-55	15-25	NP-7
	13-43	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0	90-100	85-100	60-95	30-70	20-30	5-10
	43-80	Sandy loam, loam, sandy clay loam	SC, SC-SM, CL, CL-ML	A-2, A-4, A-6	0	0	90-100	85-100	60-95	30-70	20-35	5-13
JaC:												
Japany----------	0-3	Silt loam	CL, ML, CL-ML	A-4	0	0	100	100	90-100	70-90	0-30	NP-10
	3-10	Silty clay loam, silt loam	ML, CL-ML, CL	A-4	0	0	100	100	90-100	70-90	0-30	NP-10
	10-25	Clay loam, silty clay, silty clay loam	CL, CH	A-6, A-7	0	0	100	100	95-100	85-95	38-70	22-45
	25-55	Silty clay, clay	CL, CH	A-6, A-7	0	0	100	100	95-100	85-95	38-70	22-45
	55-80	Clay, silty clay	CL, CH	A-7	0	0	100	100	90-100	75-95	48-80	26-50
LaB:												
Laneburg--------	0-7	Silty clay loam	CL, CH	A-7	0	0	100	100	95-100	90-95	45-65	25-40
	7-23	Clay, silty clay, silty clay loam	CH	A-7	0	0	100	100	90-100	80-95	55-80	30-55
	23-44	Clay, silty clay, silty clay loam	CH	A-7	0	0	100	100	90-100	80-95	55-80	30-55
	44-80	Clay	CH	A-7	0	0	100	100	95-100	80-90	55-85	30-50
OuA:												
Ouachita--------	0-4	Silt loam	CL-ML, CL, ML	A-4	0	0	100	100	85-95	55-85	0-30	2-10
	4-42	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0	100	100	85-95	55-90	25-40	5-15
	42-80	Very fine sandy loam, silt loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0	0	100	100	70-95	30-90	15-25	NP-7

Table 15.-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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plas- ticity index
	In				*Pct*	*Pct*					*Pct*	
PkC:												
Pikeville-------	0-5	Fine sandy loam	ML, SM	A-4	0	0	90-100	90-100	50-85	36-60	0-30	NP-4
	5-11	Loam, fine sandy loam	ML, SM	A-4	0	0	90-100	90-100	50-85	36-60	0-30	NP-4
	11-32	Sandy clay loam, loam, gravelly loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	80-100	65-100	60-90	36-60	20-40	4-17
	32-80	Very gravelly sandy loam, very gravelly loam, very gravelly sandy clay loam, extremely gravelly sandy clay loam	SM, SW-SM, GW-GM, GM	A-1, A-2	0	0-5	35-75	20-65	15-55	9-30	20-45	2-16
PtC:												
Prescott--------	0-6	Silt loam	CL-ML, CL	A-4	0	0	100	100	95-100	90-100	20-30	5-10
	6-35	Silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-95	30-45	15-30
	35-65	Silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-95	30-45	15-30
	65-80	Gravelly silty clay, clay	CH	A-7	0	0	100	100	90-100	85-95	51-75	30-50
RsC:												
Rosalie---------	0-8	Loamy fine sand	SP-SM, SM	A-2-4	0	0	95-100	95-100	75-85	10-20	0-25	NP-3
	8-36	Loamy sand, loamy fine sand	SM, SP-SM	A-2-4	0	0	95-100	95-100	75-85	10-20	0-25	NP-3
	36-80	Loam, sandy clay loam, clay loam	CL, SC	A-4, A-6	0	0	98-100	95-100	80-90	36-70	20-40	8-20
RuB:												
Ruston----------	0-8	Fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0	0	100	85-100	65-85	30-55	0-20	NP-7
	8-13	Fine sandy loam, loam	CL, SC	A-6, A-7-6	0	0	100	85-100	80-95	36-75	25-45	11-20
	13-66	Fine sandy loam, sandy clay loam, clay loam	SM, SC-SM, ML, CL-ML	A-2-4, A-4	0	0	100	85-100	65-85	30-75	0-27	NP-7
	66-80	Sandy clay loam, loam, clay loam	SC, CL	A-6, A-7-6	0	0	100	85-100	80-95	36-75	25-45	11-20

Table 15.-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*	
SaB:												
Sacul-----------	0-3	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	75-100	75-100	45-85	25-50	15-25	NP-7
	3-7	Loam, fine sandy loam	SM, SC-SM, ML, CL-ML	A-1, A-2, A-4	0	0	75-100	75-100	40-95	12-75	15-30	NP-10
	7-24	Clay, silty clay, sandy clay	CH, CL, SC	A-7	0	0	85-100	85-100	70-100	40-95	45-70	20-40
	24-73	Sandy clay loam, silty clay loam, clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
	73-80	Silt loam, fine sandy loam, silty clay loam, clay loam, sandy clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
SaC:												
Sacul-----------	0-3	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	75-100	75-100	45-85	25-50	15-25	NP-7
	3-7	Loam, fine sandy loam	ML, SC-SM, CL-ML, SM	A-1, A-2, A-4	0	0	75-100	75-100	40-95	12-75	15-30	NP-10
	7-24	Clay, silty clay, sandy clay	CH, CL, SC	A-7	0	0	85-100	85-100	70-100	40-95	45-70	20-40
	24-73	Sandy clay loam, silty clay loam, clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
	73-80	Silt loam, fine sandy loam, silty clay loam, clay loam, sandy clay loam	CL, SC	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
SaD:												
Sacul-----------	0-3	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	75-100	75-100	45-85	25-50	15-25	NP-7
	3-7	Loam, fine sandy loam	SC-SM, CL-ML, ML, SM	A-1, A-2, A-4	0	0	75-100	75-100	40-95	12-75	15-30	NP-10
	7-24	Clay, silty clay, sandy clay	SC, CL, CH	A-7	0	0	85-100	85-100	70-100	40-95	45-70	20-40
	24-73	Sandy clay loam, silty clay loam, clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
	73-80	Silt loam, fine sandy loam, silty clay loam, clay loam, sandy clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25

Table 15.-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*	
SaE:												
Sacul-----------	0-3	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	75-100	75-100	45-85	25-50	15-25	NP-7
	3-7	Loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-1, A-2, A-4	0	0	75-100	75-100	40-95	12-75	15-30	NP-10
	7-24	Clay, silty clay, sandy clay	CH, CL, SC	A-7	0	0	85-100	85-100	70-100	40-95	45-70	20-40
	24-73	Sandy clay loam, silty clay loam, clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
	73-80	Silt loam, fine sandy loam, silty clay loam, clay loam, sandy clay loam	SC, CL	A-2, A-4, A-6, A-7	0	0	85-100	85-100	65-100	30-95	25-48	8-25
SfC:												
Saffell---------	0-9	Gravelly fine sandy loam	SM, GM, GC-GM, SC-SM	A-1, A-2, A-4	0	0-5	50-80	50-75	40-70	20-50	0-25	NP-5
	9-17	Gravelly fine sandy loam, gravelly sandy loam, gravelly loam	SM, SC-SM, GM, GC-GM	A-1, A-2, A-4	0	0-5	50-80	50-75	40-70	20-50	0-25	NP-5
	17-28	Very gravelly sandy clay loam, very gravelly loam	GC, SC-SM, SC, GC-GM	A-1, A-2, A-4, A-6	0	0-10	30-75	25-75	20-70	12-50	20-40	4-18
	28-53	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC-GM, GC	A-1, A-2, A-4, A-6	0	0-10	25-55	25-50	20-50	12-40	20-40	4-15
	53-80	Extremely gravelly sandy loam, extremely gravelly loam	GC, GM, SC, SM	A-1, A-2, A-3	0-5	0-15	15-80	10-75	10-65	5-35	0-35	NP-15

Table 15.-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*	
SfD:												
Saffell---------	0-9	Gravelly fine sandy loam	SC-SM, GC-GM, GM, SM	A-1, A-2, A-4	0	0-5	50-80	50-75	40-70	20-50	0-25	NP-5
	9-17	Gravelly fine sandy loam, gravelly sandy loam, gravelly loam	GC-GM, SM, SC-SM, GM	A-1, A-2, A-4	0	0-5	50-80	50-75	40-70	20-50	0-25	NP-5
	17-28	Very gravelly sandy clay loam, very gravelly loam	SC-SM, SC, GC-GM, GC	A-1, A-2, A-4, A-6	0	0-10	30-75	25-75	20-70	12-50	20-40	4-18
	28-53	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC-GM, GC	A-2, A-4, A-6, A-1	0	0-10	25-55	25-50	20-50	12-40	20-40	4-15
	53-80	Extremely gravelly sandy loam, extremely gravelly loam	SM, SC, GM, GC	A-1, A-2, A-3	0-5	0-15	15-80	10-75	10-65	5-35	0-35	NP-15
SiB:												
Sardis----------	0-6	Silt loam	CL, ML, CL-ML	A-4	0	0	100	100	85-100	50-90	0-30	NP-10
	6-60	Silt loam, silty clay loam, clay loam	CL-ML, CL	A-4, A-6	0	0	100	100	90-100	70-95	25-40	5-20
	60-80	Clay loam, loam, silt loam, silty clay loam	CL, SM, ML, SC	A-2, A-4	0	0	100	95-100	60-95	30-90	0-30	NP-10
SnB:												
Savannah--------	0-6	Fine sandy loam	ML, SM	A-2-4, A-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	6-12	Fine sandy loam, sandy loam, loam	ML, SM	A-2-4, A-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	12-28	Sandy clay loam, clay loam, loam	SC, CL, CL-ML	A-4, A-6	0	0	98-100	90-100	80-100	40-80	23-40	7-19
	28-80	Loam, clay loam, sandy clay loam	CL, CL-ML, SC	A-2, A-4, A-6, A-7	0	0	94-100	90-100	60-100	30-80	23-43	7-19
SnC:												
Savannah--------	0-6	Fine sandy loam	SM, ML	A-2-4, A-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	6-12	Sandy loam, fine sandy loam, loam	SM, ML	A-2-4, A-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	12-28	Sandy clay loam, clay loam, loam	SC, CL-ML, CL	A-4, A-6	0	0	98-100	90-100	80-100	40-80	23-40	7-19
	28-80	Loam, clay loam, sandy clay loam	SC, CL-ML, CL	A-2, A-4, A-6, A-7	0	0	94-100	90-100	60-100	30-80	23-43	7-19

Table 15.-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*	
SrB:												
Sawyer----------	0-7	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	95-100	85-95	50-90	25-30	3-10
	7-14	Loam, fine sandy loam, silt loam	CL, CL-ML, ML	A-4	0	0	100	95-100	85-95	50-90	25-30	3-10
	14-50	Silt loam, silty clay loam, loam	CL, ML	A-4, A-6	0	0	100	95-100	85-95	50-90	30-40	8-20
	50-60	Silty clay loam, clay, silty clay	CL	A-6	0	0	100	95-100	85-95	60-95	30-40	10-20
	60-80	Silty clay, clay	CL, CH	A-7	0	0	100	95-100	90-100	75-95	45-60	20-35
SrC:												
Sawyer----------	0-7	Very fine sandy loam	CL, CL-ML, ML	A-4	0	0	100	95-100	85-95	50-90	25-30	3-10
	7-14	Silt loam, loam, fine sandy loam	ML, CL-ML, CL	A-4	0	0	100	95-100	85-95	50-90	25-30	3-10
	14-50	Silt loam, silty clay loam, loam	CL, ML	A-4, A-6	0	0	100	95-100	85-95	50-90	30-40	8-20
	50-60	Silty clay loam, clay, silty clay	CL	A-6	0	0	100	95-100	85-95	60-95	30-40	10-20
	60-80	Silty clay, clay	CH, CL	A-7	0	0	100	95-100	90-100	75-95	45-60	20-35
StC:												
Smithdale-------	0-5	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	5-11	Sandy loam, fine sandy loam, loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	11-50	Clay loam, sandy clay loam, loam	CL, CL-ML, SC-SM, SC	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	50-80	Loam, sandy loam	CL, ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
StD:												
Smithdale-------	0-5	Fine sandy loam	SC-SM, SM	A-4, A-2	0	0	100	85-100	60-95	28-49	0-20	NP-5
	5-11	Sandy loam, fine sandy loam, loam	SM, SC-SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	11-50	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	50-80	Loam, sandy loam	CL, ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10

Table 15.-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*	
StE:												
Smithdale-------	0-5	Fine sandy loam	SM, SC-SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	5-11	Sandy loam, fine sandy loam, loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	11-50	Clay loam, sandy clay loam, loam	CL-ML, CL, SC, SC-SM	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	50-80	Loam, sandy loam	SM, SC, CL, ML	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
SuB:												
Smithton--------	0-4	Loam	ML, CL-ML	A-4	0	0	95-100	95-100	85-95	50-75	15-25	NP-7
	4-9	Fine sandy loam, loam	SC-SM, SM, CL-ML, ML	A-2, A-4	0	0	95-100	95-100	60-95	30-75	20-25	NP-5
	9-55	Fine sandy loam, loam, very fine sandy loam	SM, SC-SM, ML, CL-ML	A-2, A-4	0	0	95-100	95-100	60-95	30-90	15-25	NP-7
	55-80	Loam, sandy clay loam, silty clay loam	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6	0	0	95-100	95-100	60-95	30-95	15-35	NP-13
UnA:												
Una-------------	0-5	Silty clay loam	CL, CH	A-7	0	0	100	100	90-100	75-95	41-65	20-40
	5-64	Clay, silty clay loam, silty clay	CH, CL	A-7	0	0	100	100	90-100	75-95	41-65	20-40
	64-80	Clay, silty clay loam, silty clay	CH, CL	A-7	0	0	100	100	90-100	75-95	41-65	20-40
UrA:												
Urbo------------	0-11	Silt loam	CL	A-6	0	0	100	100	95-100	95-100	30-40	15-25
	11-60	Silty clay, clay loam, silty clay loam	CL, CH	A-7	0	0	100	100	95-100	80-98	44-62	20-36
	60-80	Silty clay, clay loam, silty clay loam	CL, CH	A-7	0	0	100	100	95-100	80-98	44-62	20-36
WaC:												
Warnock---------	0-10	Fine sandy loam	SC-SM, SM	A-2, A-4	0	0	90-100	85-100	60-85	30-50	15-25	NP-7
	10-16	Fine sandy loam, sandy loam	SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-85	15-50	15-25	NP-7
	16-47	Loam, sandy clay loam, clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	90-100	85-100	80-100	36-80	20-40	7-20
	47-80	Loam, sandy clay loam, clay loam, silty clay loam	SC, SC-SM, CL, CL-ML	A-4, A-6	0	0	90-100	85-100	80-100	36-95	15-40	4-20

Table 15.-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*	
WxC:												
Wilcox----------	0-4	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	95-100	80-98	30-51	15-30
	4-30	Clay, silty clay	CH	A-7	0	0	100	100	95-100	80-98	50-78	22-46
	30-55	Clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	55-59	Silty clay, clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	59-80	Weathered bedrock			---	---	---	---	---	---	---	---
WxD:												
Wilcox----------	0-4	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	95-100	80-98	30-51	15-30
	4-30	Clay, silty clay	CH	A-7	0	0	100	100	95-100	80-98	50-78	22-46
	30-55	Clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	55-59	Clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	59-80	Weathered bedrock			---	---	---	---	---	---	---	---

Table 16.-Physical Soil Properties

(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	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	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*	*Pct*	*Pct*	*g/cc*	*um/sec*	*In/in*	*Pct*	*Pct*					
AdB:														
Adaton	0-7	---	---	10-25	1.35-1.55	4.00-14.00	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	7-60	---	---	20-50	1.20-1.45	0.42-1.40	0.18-0.22	3.0-5.9	0.1-1.0	.32	.32			
	60-80	---	---	30-60	1.15-1.45	0.42-1.40	0.18-0.22	3.0-5.9	0.1-0.5	.32	.32			
AmB:														
Amy	0-3	---	---	10-25	1.35-1.55	4.00-14.00	0.13-0.20	0.0-2.9	0.5-3.0	.43	.43	5	8	0
	3-11	---	---	5-20	1.35-1.55	4.00-14.00	0.13-0.20	0.0-2.9	0.5-1.0	.43	.43			
	11-40	---	---	18-35	1.35-1.50	1.40-4.00	0.13-0.20	0.0-2.9	0.5-1.0	.43	.43			
	40-72	---	---	18-35	1.35-1.50	1.40-4.00	0.13-0.20	0.0-2.9	0.1-0.5	.43	.43			
	72-80	---	---	15-35	1.35-1.50	1.40-4.00	0.13-0.20	0.0-2.9	0.1-0.5	.43	.43			
AnC:														
Angie	0-7	---	---	8-20	1.35-1.50	4.00-42.00	0.10-0.15	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	7-14	---	---	4-15	1.35-1.50	4.00-42.00	0.10-0.15	0.0-2.9	0.5-2.0	.32	.32			
	14-55	---	---	30-60	1.20-1.40	0.42-1.40	0.16-0.22	6.0-8.9	0.1-0.5	.32	.32			
	55-80	---	---	40-60	1.25-1.60	0.42-1.40	0.16-0.22	6.0-8.9	0.1-0.5	.32	.32			
BbA:														
Bibb	0-3	---	---	6-20	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	3-13	---	---	6-20	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0.5-1.5	.20	.20			
	13-80	---	---	8-20	1.40-1.55	4.00-14.00	0.10-0.20	0.0-2.9	0.5-1.0	.37	.37			
BoB:														
Bowie	0-5	---	---	5-20	1.40-1.55	14.00-42.00	0.10-0.15	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	5-10	---	---	5-15	1.40-1.55	14.00-42.00	0.10-0.15	0.0-2.9	0.5-1.0	.32	.32			
	10-40	---	---	20-35	1.35-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.1-1.0	.32	.32			
	40-50	---	---	20-35	1.35-1.50	1.40-4.00	0.10-0.16	0.0-2.9	0.1-0.5	.32	.32			
	50-80	---	---	25-40	1.35-1.50	1.40-4.00	0.10-0.16	3.0-5.9	0.1-0.5	.32	.32			
BoC:														
Bowie	0-5	---	---	5-20	1.40-1.55	14.00-42.00	0.10-0.15	0.0-2.9	0.5-3.0	.32	.32	5	3	86
	5-10	---	---	5-15	1.40-1.55	14.00-42.00	0.10-0.15	0.0-2.9	0.5-1.0	.32	.32			
	10-40	---	---	20-35	1.35-1.50	4.00-14.00	0.10-0.16	0.0-2.9	0.1-1.0	.32	.32			
	40-50	---	---	20-35	1.35-1.50	1.40-4.00	0.10-0.16	0.0-2.9	0.1-0.5	.32	.32			
	50-80	---	---	25-40	1.35-1.50	1.40-4.00	0.10-0.16	3.0-5.9	0.1-0.5	.32	.32			
BrC:														
Briley	0-4	---	---	5-15	1.40-1.55	42.00-141.00	0.05-0.09	0.0-2.9	0.5-2.0	.20	.20	5	2	134
	4-21	---	---	5-18	1.40-1.55	42.00-141.00	0.05-0.09	0.0-2.9	0.1-1.0	.20	.20			
	21-80	---	---	15-35	1.35-1.55	4.00-14.00	0.10-0.16	0.0-2.9	0.1-0.5	.24	.24			

Table 16.-Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	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*	*Pct*	*Pct*	*g/cc*	*um/sec*	*In/in*	*Pct*	*Pct*					
DaC:														
Darden---------------	0-6	---	---	2-10	1.45-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-2.0	.15	.15	5	1	310
	6-80	---	---	2-14	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.15	.15			
DaD:														
Darden---------------	0-6	---	---	2-10	1.45-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-2.0	.15	.15	5	1	310
	6-80	---	---	2-14	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.15	.15			
DaE:														
Darden---------------	0-6	---	---	2-10	1.45-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-2.0	.15	.15	5	1	310
	6-80	---	---	2-14	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.15	.15			
DeC:														
DeAnn----------------	0-6	---	---	50-65	1.10-1.25	0.01-0.42	0.12-0.16	6.0-8.9	2.0-4.0	.37	.37	5	4	86
	6-20	---	---	55-75	1.10-1.25	0.01-0.42	0.12-0.16	9.0-25.0	0.5-2.0	.32	.32			
	20-80	---	---	55-75	1.10-1.25	0.01-0.42	0.12-0.16	9.0-25.0	0.2-0.8	.32	.32			
GyB:														
Guyton---------------	0-3	---	---	7-25	1.35-1.55	4.00-14.00	0.20-0.23	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	3-14	---	---	7-25	1.35-1.55	4.00-14.00	0.20-0.23	0.0-2.9	0.5-2.0	.43	.43			
	14-63	---	---	20-35	1.35-1.50	1.42-4.00	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
	63-80	---	---	20-35	1.35-1.50	1.42-4.00	0.15-0.22	0.0-2.9	0.5-1.0	.37	.37			
HaC:														
Harleston------------	0-7	---	---	8-15	1.35-1.55	4.00-42.00	0.08-0.16	0.0-2.9	1.0-3.0	.20	.20	5	5	56
	7-13	---	---	8-15	1.35-1.55	4.00-42.00	0.08-0.16	0.0-2.9	0.5-2.0	.20	.20			
	13-43	---	---	8-18	1.35-1.55	4.00-14.00	0.13-0.16	0.0-2.9	0.1-0.5	.32	.32			
	43-80	---	---	8-27	1.35-1.55	4.00-14.00	0.13-0.16	0.0-2.9	0.1-0.5	.32	.32			
JaC:														
Japany---------------	0-3	---	---	16-27	1.35-1.50	4.00-14.00	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32	5	5	56
	3-10	---	---	16-35	1.35-1.50	4.00-14.00	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32			
	10-25	---	---	30-50	1.30-1.50	1.42-4.20	0.20-0.22	6.0-8.9	0.1-0.5	.32	.32			
	25-55	---	---	30-50	1.30-1.45	0.42-1.40	0.20-0.22	6.0-8.9	0.1-0.5	.32	.32			
	55-80	---	---	40-60	1.15-1.35	0.01-0.42	0.18-0.20	9.0-25.0	0.1-0.5	.32	.32			
LaB:														
Laneburg-------------	0-7	---	---	30-40	1.30-1.40	0.42-1.40	0.18-0.20	6.0-8.9	1.0-3.0	.37	.37	5	5	56
	7-23	---	---	30-60	1.20-1.40	0.01-0.42	0.17-0.19	9.0-25.0	0.1-1.0	.32	.32			
	23-44	---	---	38-60	1.20-1.35	0.01-0.42	0.17-0.19	9.0-25.0	0.1-1.0	.32	.32			
	44-80	---	---	40-60	1.20-1.35	0.01-0.42	0.10-0.15	9.0-25.0	0.0-0.5	.32	.32			

Table 16.-Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*um/sec*	*In/in*	*Pct*	*Pct*					
OuA:														
Ouachita-------------	0-4	---	---	8-25	1.35-1.55	4.00-14.00	0.15-0.22	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	4-42	---	---	18-35	1.35-1.50	1.40-4.00	0.15-0.22	0.0-2.9	0.5-1.0	.32	.32			
	42-80	---	---	8-25	1.35-1.55	4.00-14.00	0.07-0.22	0.0-2.9	0.1-0.5	.24	.24			
PkC:														
Pikeville------------	0-5	---	---	6-15	1.40-1.55	4.00-14.00	0.10-0.15	0.0-2.9	0.5-2.0	.24	.24	4	3	86
	5-11	---	---	6-20	1.40-1.65	4.00-14.00	0.10-0.15	0.0-2.9	0.5-1.5	.24	.24			
	11-32	---	---	18-35	1.35-1.50	4.00-14.00	0.10-0.15	0.0-2.9	0.1-1.0	.37	.37			
	32-80	---	---	16-32	1.35-1.50	1.40-14.00	0.04-0.08	0.0-2.9	0.1-0.5	.10	.24			
PtC:														
Prescott-------------	0-6	---	---	10-25	1.40-1.55	1.40-4.00	0.21-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	6-35	---	---	15-35	1.40-1.50	1.40-4.00	0.19-0.22	3.0-5.9	0.1-1.0	.43	.43			
	35-65	---	---	15-35	1.40-1.50	1.40-4.00	0.19-0.22	3.0-5.9	0.1-0.5	.37	.37			
	65-80	---	---	40-60	1.25-1.40	0.42-1.40	0.16-0.18	6.0-8.9	0.1-0.5	.24	.24			
RsC:														
Rosalie--------------	0-8	---	---	5-12	1.45-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.5-2.0	.17	.17	5	2	134
	8-36	---	---	5-12	1.45-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.5-2.0	.17	.17			
	36-80	---	---	20-30	1.40-1.55	4.00-14.00	0.14-0.17	0.0-2.9	0.1-0.5	.24	.24			
RuB:														
Ruston---------------	0-8	---	---	8-20	1.40-1.55	4.00-14.00	0.09-0.16	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	8-13	---	---	15-25	1.40-1.55	4.00-14.00	0.12-0.17	0.0-2.9	0.1-1.0	.28	.28			
	13-66	---	---	18-38	1.35-1.55	4.00-14.00	0.12-0.15	0.0-2.9	0.1-0.5	.28	.32			
	66-80	---	---	18-38	1.35-1.55	4.00-14.00	0.12-0.17	0.0-2.9	0.1-0.5	.28	.28			
SaB:														
Sacul----------------	0-3	---	---	5-20	1.30-1.55	4.00-14.00	0.09-0.12	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	3-7	---	---	5-25	1.40-1.55	4.00-14.00	0.07-0.17	0.0-2.9	0.5-2.0	.28	.28			
	7-24	---	---	35-60	1.25-1.40	0.42-1.40	0.15-0.18	6.0-8.9	0.5-1.0	.32	.32			
	24-73	---	---	20-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
	73-80	---	---	15-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
SaC:														
Sacul----------------	0-3	---	---	5-20	1.30-1.55	4.00-14.00	0.09-0.12	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	3-7	---	---	5-25	1.40-1.55	4.00-14.00	0.07-0.17	0.0-2.9	0.5-2.0	.28	.28			
	7-24	---	---	35-60	1.25-1.40	0.42-1.40	0.15-0.18	6.0-8.9	0.5-1.0	.32	.32			
	24-73	---	---	20-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
	73-80	---	---	15-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			

Table 16.-Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	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*	*Pct*	*Pct*	*g/cc*	*um/sec*	*In/in*	*Pct*	*Pct*					
SaD:														
Sacul----------------	0-3	---	---	5-20	1.30-1.55	4.00-14.00	0.09-0.12	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	3-7	---	---	5-25	1.40-1.55	4.00-14.00	0.07-0.17	0.0-2.9	0.5-2.0	.28	.28			
	7-24	---	---	35-60	1.25-1.40	0.42-1.40	0.15-0.18	6.0-8.9	0.5-1.0	.32	.32			
	24-73	---	---	20-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
	73-80	---	---	15-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
SaE:														
Sacul----------------	0-3	---	---	5-20	1.30-1.55	4.00-14.00	0.09-0.12	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	3-7	---	---	5-25	1.40-1.55	4.00-14.00	0.07-0.17	0.0-2.9	0.5-2.0	.28	.28			
	7-24	---	---	35-60	1.25-1.40	0.42-1.40	0.15-0.18	6.0-8.9	0.5-1.0	.32	.32			
	24-73	---	---	20-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
	73-80	---	---	15-40	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.1-0.5	.28	.37			
SfC:														
Saffell--------------	0-9	---	---	5-20	1.45-1.55	14.00-42.00	0.07-0.17	0.0-2.9	1.0-2.0	.20	.24	5	3	86
	9-17	---	---	5-20	1.45-1.55	14.00-42.00	0.07-0.17	0.0-2.9	0.5-1.0	.20	.24			
	17-28	---	---	10-35	1.35-1.55	4.00-14.00	0.06-0.15	0.0-2.9	0.1-0.5	.28	.24			
	28-53	---	---	12-35	1.35-1.55	4.00-14.00	0.06-0.12	0.0-2.9	0.1-0.5	.28	.32			
	53-80	---	---	10-25	1.40-1.55	4.00-14.00	0.04-0.11	0.0-2.9	0.1-0.5	.17	.20			
SfD:														
Saffell--------------	0-9	---	---	5-20	1.45-1.55	14.00-42.00	0.07-0.17	0.0-2.9	1.0-2.0	.20	.24	5	3	86
	9-17	---	---	5-20	1.45-1.55	14.00-42.00	0.07-0.17	0.0-2.9	0.5-1.0	.20	.24			
	17-28	---	---	10-35	1.35-1.55	4.00-14.00	0.06-0.15	0.0-2.9	0.1-0.5	.28	.24			
	28-53	---	---	12-35	1.35-1.55	4.00-14.00	0.06-0.12	0.0-2.9	0.1-0.5	.28	.32			
	53-80	---	---	10-25	1.40-1.55	4.00-14.00	0.04-0.11	0.0-2.9	0.1-0.5	.17	.20			
SiB:														
Sardis---------------	0-6	---	---	10-25	1.35-1.55	4.00-14.00	0.15-0.24	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	6-60	---	---	14-35	1.35-1.55	4.00-14.00	0.15-0.24	0.0-2.9	0.5-1.0	.37	.37			
	60-80	---	---	10-35	1.35-1.55	4.00-14.00	0.10-0.24	0.0-2.9	0.1-0.5	.37	.37			
SnB:														
Savannah-------------	0-6	---	---	8-18	1.40-1.55	4.00-14.00	0.13-0.16	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	6-12	---	---	5-10	1.40-1.55	4.00-14.00	0.13-0.16	0.0-2.9	0.5-1.0	.24	.24			
	12-28	---	---	18-32	1.40-1.50	4.00-14.00	0.11-0.17	0.0-2.9	0.2-1.0	.28	.28			
	28-80	---	---	18-32	1.50-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.5	.24	.24			
SnC:														
Savannah-------------	0-6	---	---	8-18	1.40-1.55	4.00-14.00	0.13-0.16	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	6-12	---	---	5-10	1.40-1.55	4.00-14.00	0.13-0.16	0.0-2.9	0.5-1.0	.24	.24			
	12-28	---	---	18-32	1.40-1.50	4.00-14.00	0.11-0.17	0.0-2.9	0.2-1.0	.28	.28			
	28-80	---	---	18-32	1.50-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.5	.24	.24			

Table 16.-Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*um/sec*	*In/in*	*Pct*	*Pct*					
SrB:														
Sawyer---------------	0-7	---	---	10-25	1.35-1.50	4.00-14.00	0.15-0.20	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	7-14	---	---	15-25	1.35-1.50	4.00-14.00	0.15-0.20	0.0-2.9	0.5-2.0	.37	.37			
	14-50	---	---	15-35	1.30-1.50	4.00-14.00	0.15-0.20	3.0-5.9	0.5-1.0	.32	.32			
	50-60	---	---	30-50	1.25-1.50	1.40-4.00	0.15-0.20	3.0-5.9	0.1-0.5	.32	.32			
	60-80	---	---	40-60	1.15-1.50	0.42-1.40	0.14-0.20	6.0-8.9	0.1-0.5	.32	.32			
SrC:														
Sawyer---------------	0-7	---	---	10-25	1.35-1.50	4.00-14.00	0.15-0.20	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	7-14	---	---	15-25	1.35-1.50	4.00-14.00	0.15-0.20	0.0-2.9	0.5-2.0	.37	.37			
	14-50	---	---	15-35	1.30-1.50	4.00-14.00	0.15-0.20	3.0-5.9	0.5-1.0	.32	.32			
	50-60	---	---	30-50	1.25-1.50	1.40-4.00	0.15-0.20	3.0-5.9	0.1-0.5	.32	.32			
	60-80	---	---	40-60	1.15-1.50	0.42-1.40	0.14-0.20	6.0-8.9	0.1-0.5	.32	.32			
StC:														
Smithdale------------	0-5	---	---	6-15	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	5-11	---	---	10-20	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.5-1.5	.28	.28			
	11-50	---	---	18-35	1.35-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0.1-0.5	.24	.24			
	50-80	---	---	12-27	1.35-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.1-0.5	.28	.28			
StD:														
Smithdale------------	0-5	---	---	6-15	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	5-11	---	---	10-20	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.5-1.5	.28	.28			
	11-50	---	---	18-35	1.35-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0.1-0.5	.24	.24			
	50-80	---	---	12-27	1.35-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.1-0.5	.28	.28			
StE:														
Smithdale------------	0-5	---	---	6-15	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	5-11	---	---	10-20	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.5-1.5	.28	.28			
	11-50	---	---	18-35	1.35-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0.1-0.5	.24	.24			
	50-80	---	---	12-27	1.35-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0.1-0.5	.28	.28			
SuB:														
Smithton-------------	0-4	---	---	7-18	1.40-1.55	4.00-14.00	0.13-0.20	0.0-2.9	1.0-3.0	.32	.32	5	5	86
	4-9	---	---	5-18	1.40-1.55	4.00-14.00	0.10-0.20	0.0-2.9	0.5-2.0	.32	.32			
	9-55	---	---	8-18	1.40-1.55	1.40-4.00	0.11-0.20	0.0-2.9	0.5-1.0	.32	.32			
	55-80	---	---	8-35	1.35-1.55	1.40-4.00	0.11-0.20	3.0-5.9	0.1-1.0	.37	.37			
UnA:														
Una------------------	0-5	---	---	28-40	1.30-1.50	0.01-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32	.32	5	5	56
	5-64	---	---	28-55	1.25-1.50	0.01-0.42	0.15-0.20	6.0-8.9	0.1-1.0	.28	.28			
	64-80	---	---	28-55	1.25-1.50	0.01-0.42	0.15-0.20	6.0-8.9	0.1-1.0	.28	.28			

Table 16.-Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	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	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
UrA:														
Urbo-----------------	0-11	---	---	15-27	1.35-1.50	0.42-1.40	0.19-0.21	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	11-60	---	---	35-55	1.25-1.45	0.01-0.42	0.18-0.20	3.0-5.9	0.1-1.0	.28	.28			
	60-80	---	---	35-55	1.25-1.45	0.01-0.42	0.18-0.20	3.0-5.9	0.1-1.0	.28	.28			
WaC:														
Warnock--------------	0-10	---	---	6-18	1.40-1.55	14.00-42.00	0.08-0.12	0.0-2.9	1.0-3.0	.28	.28	5	3	86
	10-16	---	---	4-18	1.40-1.55	14.00-42.00	0.06-0.12	0.0-2.9	0.5-1.0	.24	.28			
	16-47	---	---	15-35	1.40-1.50	4.00-14.00	0.12-0.17	0.0-2.9	0.1-0.5	.24	.24			
	47-80	---	---	15-40	1.40-1.50	4.00-14.00	0.10-0.17	0.0-2.9	0.1-0.5	.24	.24			
WxC:														
Wilcox---------------	0-4	---	---	28-40	1.30-1.45	0.42-1.40	0.15-0.21	6.0-8.9	1.0-3.0	.37	.37	4	5	56
	4-30	---	---	40-60	1.20-1.35	0.01-0.42	0.18-0.20	6.0-8.9	0.2-1.0	.32	.32			
	30-55	---	---	40-70	1.20-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.1-0.5	.28	.28			
	55-59	---	---	40-60	1.15-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.1-0.5	.28	.28			
	59-80	---	---	---	---	0.01-0.42	---	---	---	---	---			
WxD:														
Wilcox---------------	0-4	---	---	28-40	1.30-1.45	0.42-1.40	0.15-0.21	6.0-8.9	1.0-3.0	.37	.37	4	5	56
	4-30	---	---	40-60	1.20-1.35	0.01-0.42	0.18-0.20	6.0-8.9	0.2-1.0	.32	.32			
	30-55	---	---	40-70	1.20-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.1-0.5	.28	.28			
	55-59	---	---	40-60	1.15-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.1-0.5	.28	.28			
	59-80	---	---	---	---	0.01-0.42	---	---	---	---	---			

Table 17.-Chemical Soil Properties

(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
	Inches	*meq/100 g*	*meq/100 g*	*pH*
AdB:				
Adaton---------------	0-7	5.4-14	---	5.1-6.0
	7-60	---	5.9-22	4.5-5.5
	60-80	---	10-27	4.5-5.5
AmB:				
Amy------------------	0-3	---	1.7-4.9	4.5-5.5
	3-11	---	8.0-10	4.5-5.5
	11-40	---	3.3-6.9	4.5-5.5
	40-72	---	3.5-7.6	4.5-5.5
	72-80	---	2.9-7.6	4.5-5.5
AnC:				
Angie----------------	0-7	0.4-7.4	---	5.1-6.0
	7-14	---	4.0-8.0	4.5-5.5
	14-55	---	5.9-13	4.5-5.5
	55-80	---	8.0-13	4.5-5.5
BbA:				
Bibb-----------------	0-3	---	1.3-5.9	4.5-5.5
	3-13	---	1.4-6.4	4.5-5.5
	13-80	---	2.1-6.4	4.5-5.5
BoB:				
Bowie----------------	0-5	2.0-10	0.8-3.9	4.5-6.0
	5-10	2.0-10	0.9-2.9	4.5-6.0
	10-40	---	5.0-15	4.5-5.5
	40-50	---	5.0-18	4.5-5.5
	50-80	---	5.0-30	4.5-5.5
BoC:				
Bowie----------------	0-5	2.0-10	0.8-3.9	4.5-6.0
	5-10	2.0-10	0.9-2.9	4.5-6.0
	10-40	---	5.0-15	4.5-5.5
	40-50	---	5.0-18	4.5-5.5
	50-80	---	5.0-30	4.5-5.5
BrC:				
Briley---------------	0-4	1.9-5.5	---	5.1-6.5
	4-21	1.8-6.5	---	5.1-6.5
	21-80	---	2.9-7.6	4.5-5.5
DaC:				
Darden---------------	0-6	1.8-8.2	---	5.1-6.0
	6-80	---	0.4-3.8	4.5-5.5
DaD:				
Darden---------------	0-6	1.8-8.2	---	5.1-6.0
	6-80	---	0.4-3.8	4.5-5.5
DaE:				
Darden---------------	0-6	1.8-8.2	---	5.1-6.0
	6-80	---	0.4-3.8	4.5-5.5
DeC:				
DeAnn----------------	0-6	39-68	---	6.1-7.3
	6-20	25-53	---	6.1-7.8
	20-80	20-42	---	6.6-8.4

Table 17.-Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	*meq/100 g*	*meq/100 g*	*pH*
GyB:				
Guyton---------------	0-3	3.8-14	---	5.1-6.0
	3-14	---	10-15	4.5-5.5
	14-63	---	5.9-12	4.5-5.5
	63-80	---	5.9-12	4.5-5.5
HaC:				
Harleston------------	0-7	3.0-5.6	---	5.1-6.0
	7-13	---	4.0-8.0	4.5-5.5
	13-43	---	1.5-3.8	4.5-5.5
	43-80	---	1.5-5.8	4.5-5.5
JaC:				
Japany---------------	0-3	10-26	---	4.5-6.0
	3-10	---	8.0-25	4.5-6.0
	10-25	---	15-30	4.5-5.5
	25-55	---	15-30	4.5-5.5
	55-80	---	20-35	4.5-5.5
LaB:				
Laneburg-------------	0-7	---	15-25	4.5-5.5
	7-23	---	15-36	4.5-5.5
	23-44	---	15-36	4.5-5.5
	44-80	6.0-30	---	5.6-7.3
OuA:				
Ouachita-------------	0-4	---	1.8-7.7	5.1-6.0
	4-42	---	5.3-12	4.5-5.5
	42-80	---	2.2-10	4.5-5.5
PkC:				
Pikeville------------	0-5	1.2-3.0	---	5.1-6.5
	5-11	---	2.0-4.0	4.5-5.5
	11-32	---	2.0-4.0	4.5-5.5
	32-80	---	2.0-4.0	4.5-5.5
PtC:				
Prescott-------------	0-6	---	2.4-7.7	5.1-6.0
	6-35	---	4.3-15	3.6-6.0
	35-65	---	4.6-15	3.6-6.0
	65-80	---	14-27	3.6-5.0
RsC:				
Rosalie--------------	0-8	2.0-10	---	5.1-6.0
	8-36	---	2.0-4.0	4.5-5.5
	36-80	---	6.4-12	4.5-5.5
RuB:				
Ruston---------------	0-8	3.0-7.4	---	5.1-6.0
	8-13	---	2.7-5.4	4.5-6.0
	13-66	---	3.5-8.3	4.5-5.5
	66-80	---	3.5-8.3	4.5-5.5
SaB:				
Sacul----------------	0-3	2.7-11	---	5.1-6.0
	3-7	---	4.0-8.0	4.5-6.0
	7-24	---	11-23	4.5-5.5
	24-73	---	6.4-17	4.5-5.5
	73-80	---	4.6-17	4.5-5.5

Table 17.-Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	*meq/100 g*	*meq/100 g*	*pH*
SaC:				
Sacul----------------	0-3	2.7-11	---	5.1-6.0
	3-7	---	4.0-8.0	4.5-6.0
	7-24	---	11-23	4.5-5.5
	24-73	---	6.4-17	4.5-5.5
	73-80	---	4.6-17	4.5-5.5
SaD:				
Sacul----------------	0-3	2.7-11	---	5.1-6.0
	3-7	---	4.0-8.0	4.5-6.0
	7-24	---	11-23	4.5-5.5
	24-73	---	6.4-17	4.5-5.5
	73-80	---	4.6-17	4.5-5.5
SaE:				
Sacul----------------	0-3	2.7-11	---	5.1-6.0
	3-7	---	4.0-8.0	4.5-6.0
	7-24	---	11-23	4.5-5.5
	24-73	---	6.4-17	4.5-5.5
	73-80	---	4.6-17	4.5-5.5
SfC:				
Saffell--------------	0-9	1.9-7.3	---	5.1-6.0
	9-17	---	0.9-3.9	4.5-5.5
	17-28	---	1.9-7.6	4.5-5.5
	28-53	---	2.3-7.6	4.5-5.5
	53-80	---	1.9-5.4	4.5-5.5
SfD:				
Saffell--------------	0-9	1.9-7.3	---	5.1-6.0
	9-17	---	0.9-3.9	4.5-5.5
	17-28	---	1.9-7.6	4.5-5.5
	28-53	---	2.3-7.6	4.5-5.5
	53-80	---	1.9-5.4	4.5-5.5
SiB:				
Sardis---------------	0-6	5.4-14	---	5.1-6.5
	6-60	---	3.9-12	4.5-5.5
	60-80	---	2.9-15	4.5-5.5
SnB:				
Savannah-------------	0-6	---	1.3-3.3	4.5-5.5
	6-12	---	2.0-6.0	4.5-5.5
	12-28	---	3.3-6.6	4.5-5.5
	28-80	---	3.5-6.9	4.5-5.5
SnC:				
Savannah-------------	0-6	---	1.3-3.3	4.5-5.5
	6-12	---	2.0-6.0	4.5-5.5
	12-28	---	3.3-6.6	4.5-5.5
	28-80	---	3.5-6.9	4.5-5.5
SrB:				
Sawyer---------------	0-7	---	2.0-5.0	4.5-5.5
	7-14	---	2.0-5.0	4.5-5.5
	14-50	---	2.0-7.0	3.6-5.0
	50-60	---	5.0-12	3.6-5.0
	60-80	---	8.0-15	3.6-5.0

Table 17.-Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	Inches	*meq/100 g*	*meq/100 g*	*pH*
SrC:				
Sawyer---------------	0-7	---	2.0-5.0	4.5-5.5
	7-14	---	2.0-5.0	4.5-5.5
	14-50	---	2.0-7.0	3.6-5.0
	50-60	---	5.0-12	3.6-5.0
	60-80	---	8.0-15	3.6-5.0
StC:				
Smithdale------------	0-5	1.2-3.0	---	5.1-6.0
	5-11	---	4.0-6.0	4.5-5.5
	11-50	---	2.0-4.0	4.5-5.5
	50-80	---	2.0-4.0	4.5-5.5
StD:				
Smithdale------------	0-5	1.2-3.0	---	5.1-6.0
	5-11	---	4.0-6.0	4.5-5.5
	11-50	---	2.0-4.0	4.5-5.5
	50-80	---	2.0-4.0	4.5-5.5
StE:				
Smithdale------------	0-5	1.2-3.0	---	5.1-6.0
	5-11	---	4.0-6.0	4.5-5.5
	11-50	---	2.0-4.0	4.5-5.5
	50-80	---	2.0-4.0	4.5-5.5
SuB:				
Smithton-------------	0-4	2.6-6.7	---	5.1-6.0
	4-9	---	4.0-8.0	4.5-5.5
	9-55	---	1.4-3.5	4.5-5.5
	55-80	---	1.4-7.6	4.5-5.5
UnA:				
Una------------------	0-5	15-22	---	5.1-6.5
	5-64	---	8.0-25	4.5-5.5
	64-80	---	8.0-25	4.5-5.5
UrA:				
Urbo-----------------	0-11	14-20	---	5.1-6.0
	11-60	---	10-25	4.5-5.5
	60-80	---	10-25	4.5-5.5
WaC:				
Warnock--------------	0-10	---	1.0-3.3	3.6-5.5
	10-16	---	0.7-3.5	3.6-5.5
	16-47	---	2.9-7.6	3.6-5.5
	47-80	---	2.9-8.8	3.6-5.5
WxC:				
Wilcox---------------	0-4	---	14-24	4.5-5.5
	4-30	---	20-36	4.5-5.5
	30-55	---	16-42	3.6-5.5
	55-59	---	16-36	3.6-5.5
	59-80	---	---	---
WxD:				
Wilcox---------------	0-4	---	14-24	4.5-5.5
	4-30	---	20-36	4.5-5.5
	30-55	---	16-42	3.6-5.5
	55-59	---	16-36	3.6-5.5
	59-80	---	---	---

Table 18.-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				Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Uncoated steel	Concrete
		In	*In*			
AdB:						
Adaton------------------	---	---	---	---	High	High
AmB:						
Amy---------------------	---	---	---	---	High	Moderate
AnC:						
Angie-------------------	---	---	---	---	High	Moderate
BbA:						
Bibb--------------------	---	---	---	---	High	Moderate
BoB:						
Bowie-------------------	---	---	---	---	Moderate	High
BoC:						
Bowie-------------------	---	---	---	---	Moderate	High
BrC:						
Briley------------------	---	---	---	---	Moderate	High
DaC:						
Darden------------------	---	---	---	---	Low	High
DaD:						
Darden------------------	---	---	---	---	Low	High
DaE:						
Darden------------------	---	---	---	---	Low	High
DeC:						
DeAnn-------------------	Paralithic bedrock	48-72	---	Weakly cemented	High	Moderate
GyB:						
Guyton------------------	---	---	---	---	High	High
HaC:						
Harleston---------------	---	---	---	---	Moderate	High
JaC:						
Japany------------------	---	---	---	---	High	High
LaB:						
Laneburg----------------	---	---	---	---	High	Moderate
OuA:						
Ouachita----------------	---	---	---	---	Moderate	Moderate
PkC:						
Pikeville---------------	---	---	---	---	Low	Moderate
PtC:						
Prescott----------------	---	---	---	---	High	Moderate
RsC:						
Rosalie-----------------	---	---	---	---	Low	High
RuB:						
Ruston------------------	---	---	---	---	Moderate	Moderate

Table 18.-Soil Features--Continued

Map symbol and soil name	Restrictive layer				Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Uncoated steel	Concrete
		In	In			
SaB:						
Sacul------------------	---	---	---	---	High	High
SaC:						
Sacul------------------	---	---	---	---	High	High
SaD:						
Sacul------------------	---	---	---	---	High	High
SaE:						
Sacul------------------	---	---	---	---	High	High
SfC:						
Saffell----------------	---	---	---	---	Low	Moderate
SfD:						
Saffell----------------	---	---	---	---	Low	Moderate
SiB:						
Sardis-----------------	---	---	---	---	High	Moderate
SnB:						
Savannah---------------	Fragipan	24-32	44-60	Noncemented	Moderate	High
SnC:						
Savannah---------------	Fragipan	24-32	44-60	Noncemented	Moderate	High
SrB:						
Sawyer-----------------	---	---	---	---	High	High
SrC:						
Sawyer-----------------	---	---	---	---	High	High
StC:						
Smithdale--------------	---	---	---	---	Low	Moderate
StD:						
Smithdale--------------	---	---	---	---	Low	Moderate
StE:						
Smithdale--------------	---	---	---	---	Low	Moderate
SuB:						
Smithton---------------	---	---	---	---	High	High
UnA:						
Una--------------------	---	---	---	---	High	High
UrA:						
Urbo-------------------	---	---	---	---	High	High
WaC:						
Warnock----------------	---	---	---	---	Moderate	High
WxC:						
Wilcox-----------------	Paralithic bedrock	40-60	---	Very weakly cemented	High	High
WxD:						
Wilcox-----------------	Paralithic bedrock	40-60	---	Very weakly cemented	High	High

Table 19.-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	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				
AdB:										
Adaton--------------------	D	Low								
			January	0.0-0.5	>6.0	---	---	None	---	None
			February	0.0-0.5	>6.0	---	---	None	---	None
			March	0.0-0.5	>6.0	---	---	None	---	None
			April	0.0-0.5	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	0.0-0.5	>6.0	---	---	None	---	None
AmB:										
Amy-----------------------	D	Low								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	0.0-1.0	>6.0	---	---	None	---	None

Table 19.-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*				
AnC:										
Angie	D	Medium								
			January	3.0-5.0	>6.0	---	---	None	---	None
			February	3.0-5.0	>6.0	---	---	None	---	None
			March	3.0-5.0	>6.0	---	---	None	---	None
			April	3.0-5.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	3.0-5.0	>6.0	---	---	None	---	None
BbA:										
Bibb	D	Very low								
			January	0.0-1.0	>6.0	---	---	None	Long	Frequent
			February	0.0-1.0	>6.0	---	---	None	Long	Frequent
			March	0.0-1.0	>6.0	---	---	None	Long	Frequent
			April	0.0-1.0	>6.0	---	---	None	Long	Frequent
			May	---	---	---	---	None	Long	Frequent
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	0.0-1.0	>6.0	---	---	None	Long	Frequent
BoB:										
Bowie	B	Medium								
			January	3.5-5.0	4.0-6.0	---	---	None	---	None
			February	3.5-5.0	4.0-6.0	---	---	None	---	None
			March	3.5-5.0	4.0-6.0	---	---	None	---	None
			April	3.5-5.0	4.0-6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	3.5-5.0	4.0-6.0	---	---	None	---	None

Table 19.-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				
BoC:										
Bowie	B	Medium								
			January	3.5-5.0	4.0-6.0	---	---	None	---	None
			February	3.5-5.0	4.0-6.0	---	---	None	---	None
			March	3.5-5.0	4.0-6.0	---	---	None	---	None
			April	3.5-5.0	4.0-6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	3.5-5.0	4.0-6.0	---	---	None	---	None
BrC:										
Briley	B	Very low								
			All months	---	---	---	---	None	---	None
DaC:										
Darden	A	Very low								
			All months	---	---	---	---	None	---	None
DaD:										
Darden	A	Low								
			All months	---	---	---	---	None	---	None
DaE:										
Darden	A	Medium								
			All months	---	---	---	---	None	---	None
DeC:										
DeAnn	D	High								
			January	4.0-6.0	>6.0	---	---	None	---	None
			February	4.0-6.0	>6.0	---	---	None	---	None
			March	4.0-6.0	>6.0	---	---	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	4.0-6.0	>6.0	---	---	None	---	None

Table 19.-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*				
GyB:										
Guyton-------------------	D	Very low								
			January	0.0-1.0	>6.0	---	---	None	Long	Frequent
			February	0.0-1.0	>6.0	---	---	None	Long	Frequent
			March	0.0-1.0	>6.0	---	---	None	Long	Frequent
			April	0.0-1.0	>6.0	---	---	None	Long	Frequent
			May	0.0-1.0	>6.0	---	---	None	Long	Frequent
			June	---	---	---	---	None	Long	Frequent
			July	---	---	---	---	None	Long	Frequent
			August	---	---	---	---	None	Long	Frequent
			September	---	---	---	---	None	Long	Frequent
			October	---	---	---	---	None	Long	Frequent
			November	---	---	---	---	None	Long	Frequent
			December	0.0-1.0	>6.0	---	---	None	Long	Frequent
HaC:										
Harleston----------------	C	Medium								
			January	2.0-3.0	>6.0	---	---	None	---	None
			February	2.0-3.0	>6.0	---	---	None	---	None
			March	2.0-3.0	>6.0	---	---	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	2.0-3.0	>6.0	---	---	None	---	None
JaC:										
Japany-------------------	D	High								
			January	1.0-1.5	1.5-2.5	---	---	None	---	None
			February	1.0-1.5	1.5-2.5	---	---	None	---	None
			March	1.0-1.5	1.5-2.5	---	---	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	1.0-1.5	1.5-2.5	---	---	None	---	None

Table 19.-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*				
LaB:										
Laneburg------------------	D	High								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	0.0-1.0	>6.0	---	---	None	---	None
OuA:										
Ouachita------------------	C	Very low								
			January	---	---	---	---	None	Brief	Frequent
			February	---	---	---	---	None	Brief	Frequent
			March	---	---	---	---	None	Brief	Frequent
			April	---	---	---	---	None	Brief	Frequent
			May	---	---	---	---	None	Brief	Frequent
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	---	---	---	---	None	Brief	Frequent
PkC:										
Pikeville-----------------	B	Low								
			All months	---	---	---	---	None	---	None

Table 19.-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*				
PtC:										
Prescott------------------	C	Medium								
			January	1.5-2.5	2.0-3.0	---	---	None	---	None
			February	1.5-2.5	2.0-3.0	---	---	None	---	None
			March	1.5-2.5	2.0-3.0	---	---	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	1.5-2.5	2.0-3.0	---	---	None	---	None
RsC:										
Rosalie-------------------	B	Very low								
			All months	---	---	---	---	None	---	None
RuB:										
Ruston--------------------	B	Low								
			All months	---	---	---	---	None	---	None
SaB:										
Sacul---------------------	C	Low								
			January	2.0-4.0	>6.0	---	---	None	---	None
			February	2.0-4.0	>6.0	---	---	None	---	None
			March	2.0-4.0	>6.0	---	---	None	---	None
			April	2.0-4.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	2.0-4.0	>6.0	---	---	None	---	None

Table 19.-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				
SaC:										
Sacul---------------------	C	High								
			January	2.0-4.0	>6.0	---	---	None	---	None
			February	2.0-4.0	>6.0	---	---	None	---	None
			March	2.0-4.0	>6.0	---	---	None	---	None
			April	2.0-4.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	2.0-4.0	>6.0	---	---	None	---	None
SaD:										
Sacul---------------------	C	High								
			January	2.0-4.0	>6.0	---	---	None	---	None
			February	2.0-4.0	>6.0	---	---	None	---	None
			March	2.0-4.0	>6.0	---	---	None	---	None
			April	2.0-4.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	2.0-4.0	>6.0	---	---	None	---	None
SaE:										
Sacul---------------------	C	Very high								
			January	2.0-4.0	>6.0	---	---	None	---	None
			February	2.0-4.0	>6.0	---	---	None	---	None
			March	2.0-4.0	>6.0	---	---	None	---	None
			April	2.0-4.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	2.0-4.0	>6.0	---	---	None	---	None

Table 19.-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*				
SfC:										
Saffell-------------------	B	Low								
			All months	---	---	---	---	None	---	None
SfD:										
Saffell-------------------	B	Medium								
			All months	---	---	---	---	None	---	None
SiB:										
Sardis--------------------	C	Very low								
			January	1.5-3.0	>6.0	---	---	None	Brief	Frequent
			February	1.5-3.0	>6.0	---	---	None	Brief	Frequent
			March	1.5-3.0	>6.0	---	---	None	Brief	Frequent
			April	1.5-3.0	>6.0	---	---	None	Brief	Frequent
			May	---	---	---	---	None	Brief	Frequent
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.5-3.0	>6.0	---	---	None	Brief	Frequent
SnB:										
Savannah------------------	C	Low								
			January	1.0-2.5	1.5-3.0	---	---	None	---	None
			February	1.0-2.5	1.5-3.0	---	---	None	---	None
			March	1.0-2.5	1.5-3.0	---	---	None	---	None
			April	1.0-2.5	1.5-3.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.0-2.5	1.5-3.0	---	---	None	---	None

Table 19.-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				
SnC:										
Savannah------------------	C	Medium								
			January	1.0-2.5	1.5-3.0	---	---	None	---	None
			February	1.0-2.5	1.5-3.0	---	---	None	---	None
			March	1.0-2.5	1.5-3.0	---	---	None	---	None
			April	1.0-2.5	1.5-3.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.0-2.5	1.5-3.0	---	---	None	---	None
SrB:										
Sawyer--------------------	C	Low								
			January	1.5-2.5	2.0-3.0	---	---	None	---	None
			February	1.5-2.5	2.0-3.0	---	---	None	---	None
			March	1.5-2.5	2.0-3.0	---	---	None	---	None
			April	1.5-2.5	2.0-3.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.5-2.5	2.0-3.0	---	---	None	---	None
SrC:										
Sawyer--------------------	C	Medium								
			January	1.5-2.5	2.0-3.0	---	---	None	---	None
			February	1.5-2.5	2.0-3.0	---	---	None	---	None
			March	1.5-2.5	2.0-3.0	---	---	None	---	None
			April	1.5-2.5	2.0-3.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.5-2.5	2.0-3.0	---	---	None	---	None

Table 19.-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*				
StC:										
Smithdale	B	Low								
			All months	---	---	---	---	None	---	None
StD:										
Smithdale	B	Medium								
			All months	---	---	---	---	None	---	None
StE:										
Smithdale	B	High								
			All months	---	---	---	---	None	---	None
SuB:										
Smithton	D	Very low								
			January	0.0-1.0	>6.0	---	---	None	---	None
			February	0.0-1.0	>6.0	---	---	None	---	None
			March	0.0-1.0	>6.0	---	---	None	---	None
			April	0.0-1.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	0.0-1.0	>6.0	---	---	None	---	None
UnA:										
Una	D	Low								
			January	0.0-1.0	>6.0	---	---	None	Long	Frequent
			February	0.0-1.0	>6.0	---	---	None	Long	Frequent
			March	0.0-1.0	>6.0	---	---	None	Long	Frequent
			April	0.0-1.0	>6.0	---	---	None	Long	Frequent
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	0.0-1.0	>6.0	---	---	None	---	None
			December	0.0-1.0	>6.0	---	---	None	Long	Frequent

Table 19.-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*				
UrA:										
Urbo----------------------	D	Low								
			January	1.0-2.0	>6.0	---	---	None	Brief	Occasional
			February	1.0-2.0	>6.0	---	---	None	Brief	Occasional
			March	1.0-2.0	>6.0	---	---	None	Brief	Occasional
			April	1.0-2.0	>6.0	---	---	None	Brief	Occasional
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.0-2.0	>6.0	---	---	None	Brief	Occasional
WaC:										
Warnock-------------------	B	Medium								
			January	2.5-4.0	4.0-6.0	---	---	None	---	None
			February	2.5-4.0	4.0-6.0	---	---	None	---	None
			March	2.5-4.0	4.0-6.0	---	---	None	---	None
			April	2.5-4.0	4.0-6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	2.5-4.0	4.0-6.0	---	---	None	---	None
WxC:										
Wilcox--------------------	D	Medium								
			January	1.5-3.0	>6.0	---	---	None	---	None
			February	1.5-3.0	>6.0	---	---	None	---	None
			March	1.5-3.0	>6.0	---	---	None	---	None
			April	1.5-3.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.5-3.0	>6.0	---	---	None	---	None

Table 19.-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*				
WxD:										
Wilcox--------------------	D	High								
			January	1.5-3.0	>6.0	---	---	None	---	None
			February	1.5-3.0	>6.0	---	---	None	---	None
			March	1.5-3.0	>6.0	---	---	None	---	None
			April	1.5-3.0	>6.0	---	---	None	---	None
			May	---	---	---	---	None	---	None
			June	---	---	---	---	None	---	None
			July	---	---	---	---	None	---	None
			August	---	---	---	---	None	---	None
			September	---	---	---	---	None	---	None
			October	---	---	---	---	None	---	None
			November	---	---	---	---	None	---	None
			December	1.5-3.0	>6.0	---	---	None	---	None

Table 20.-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
Adaton	Fine-silty, mixed, active, thermic Typic Endoaqualfs
Amy	Fine-silty, siliceous, semiactive, thermic Typic Endoaquults
Angie	Fine, mixed, semiactive, thermic Aquic Paleudults
Bibb	Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Bowie	Fine-loamy, siliceous, semiactive, thermic Plinthic Paleudults
Briley	Loamy, siliceous, semiactive, thermic Arenic Paleudults
Darden	Thermic, coated Typic Quartzipsamments
DeAnn	Very-fine, smectitic, thermic Oxyaquic Hapluderts
Guyton	Fine-silty, siliceous, active, thermic Typic Glossaqualfs
Harleston	Coarse-loamy, siliceous, semiactive, thermic Aquic Paleudults
Japany	Fine, mixed, active, thermic Aquic Dystruderts
Laneburg	Fine, smectitic, thermic Typic Epiaquerts
Ouachita	Fine-silty, siliceous, active, thermic Fluventic Dystrudepts
Pikeville	Fine-loamy, siliceous, subactive, thermic Typic Paleudults
Prescott	Fine-silty, mixed, active, thermic Oxyaquic Hapludalfs
Rosalie	Loamy, siliceous, active, thermic Arenic Paleudults
Ruston	Fine-loamy, siliceous, semiactive, thermic Typic Paleudults
Sacul	Fine, mixed, active, thermic Aquic Hapludults
Saffell	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Sardis	Fine-silty, siliceous, active, thermic Fluvaquentic Dystrudepts
Savannah	Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults
Sawyer	Fine-silty, siliceous, semiactive, thermic Aquic Paleudults
Smithdale	Fine-loamy, siliceous, subactive, thermic Typic Hapludults
Smithton	Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults
Una	Fine, mixed, active, acid, thermic Typic Epiaquepts
Urbo	Fine, mixed, active, acid, thermic Vertic Epiaquepts
Warnock	Fine-loamy, siliceous, semiactive, thermic Typic Paleudults
Wilcox	Very-fine, smectitic, thermic Chromic Dystruderts

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