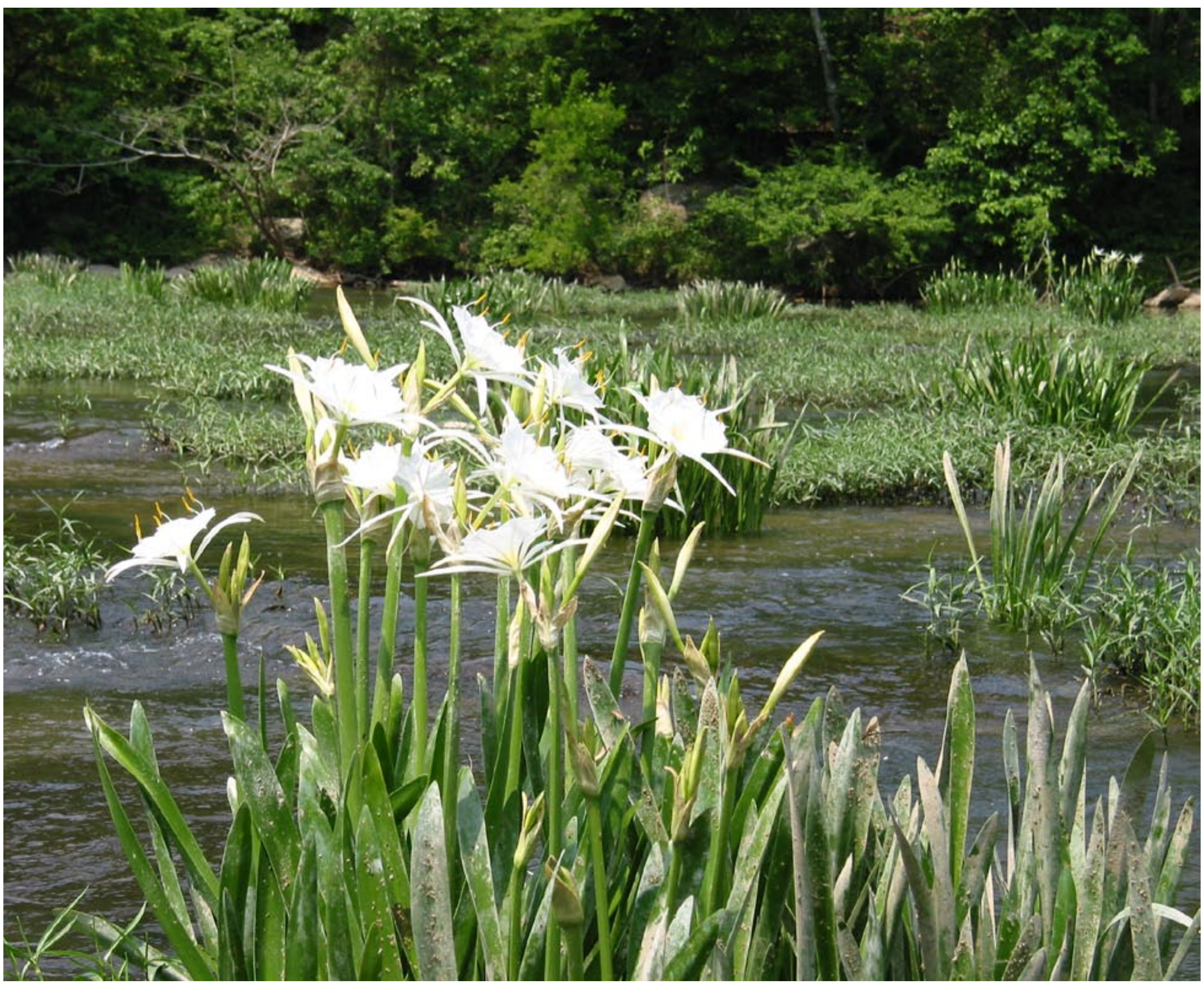
United States
Department of
Agriculture

Natural
Resources
Conservation
Service

In cooperation with
the USDA Forest Service,
the Alabama Agricultural
Experiment Station,
the Alabama Cooperative
Extension Service,
the Alabama Soil and
Water Conservation
Committee, and
the Alabama Department
of Agriculture and
Industries

Soil Survey of Bibb County, Alabama



How To Use This Soil Survey

General Soil Map

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

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

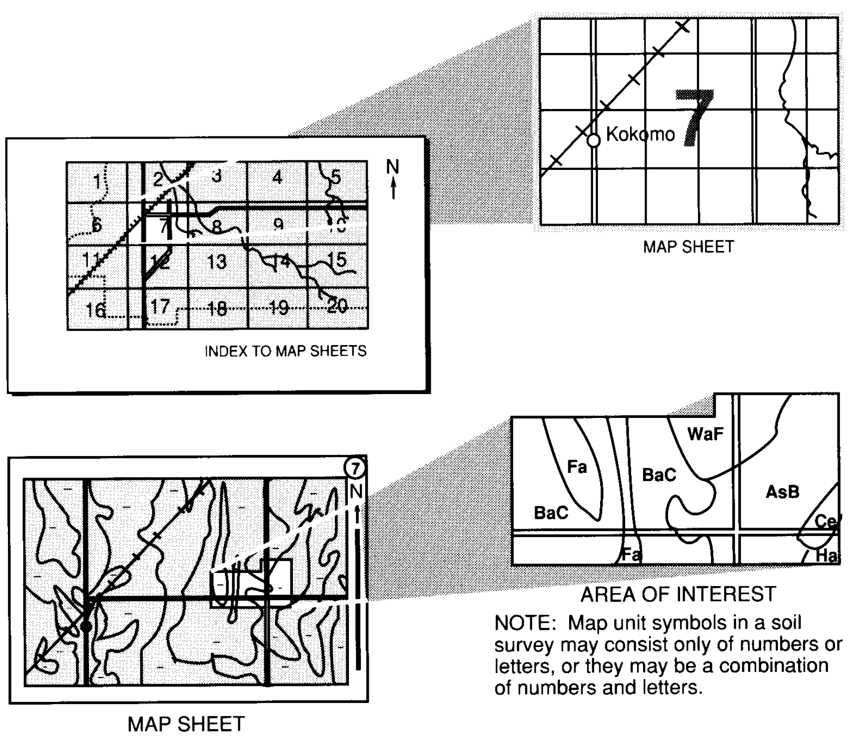
Detailed Soil Maps

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

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

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

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



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.

National Cooperative Soil Survey

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 USDA Forest Service, the Alabama Agricultural Experiment Station, the Alabama Cooperative Extension Service, the Alabama Soil and Water Conservation Committee, and the Alabama Department of Agriculture and Industries. It is part of the technical assistance furnished to the Bibb County Soil and Water Conservation District.

Major fieldwork for this soil survey was completed in 2007. Soil names and descriptions were approved in 2007. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2005. The most current official data are available at http://websoilsurvey.nrcs.usda.gov/app/.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

Nondiscrimination Statement

Citation

The correct citation for this survey is as follows:

United States Department of Agriculture, Natural Resources Conservation Service. 2008. Soil Survey of Bibb County, Alabama. Accessible online at: http://soils.usda.gov/survey/printed_surveys/.

Cover Caption

Cahaba Lilies growing in the rock shoals of the Cahaba River. These plants bloom most abundantly from mid-May to mid-June.

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

Contents

Issued December 2008

Foreword

This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

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

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

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

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension System.

Gary Kobylski
State Conservationist
Natural Resources Conservation Service

Soil Survey of
Bibb County, Alabama

By Lawrence E. McGhee, Natural Resources Conservation Service

Fieldwork by Lawrence E. McGhee, John L. Burns, Christopher Z. Ford, Jerome Langlinais, Zamir Libohova, Sylvia A. Long, Stephon Thomas, and Angela Warden, Natural Resources Conservation Service

United States Department of Agriculture,
Natural Resources Conservation Service,
in cooperation with
the USDA Forest Service,
the Alabama Agricultural Experiment Station,
the Alabama Cooperative Extension Service,
the Alabama Soil and Water Conservation Committee, and
the Alabama Department of Agriculture and Industries

This soil survey updates the survey of Bibb County published in 1908 (Tharp and Lett, 1908). It provides additional information and has larger maps, which show the soils in greater detail.

General Nature of the Survey Area

Bibb County is near the center of Alabama (fig. 1). It is bordered on the north by Jefferson County, on the northeast by Shelby County, on the southeast by Chilton County, on the southwest by Hale and Perry Counties, and on the northwest by Tuscaloosa County. Centreville, the county seat, is near the center of the county. Bibb County is about 70 miles northwest of Montgomery. The total area of the county is 399,980 acres, or about 626 square miles. The county has a maximum length of 37 miles from north to south and a maximum width of 24 miles from east to west. About 399,780 acres is land areas and small areas of water. About 200 acres is large bodies of water in lakes.

Bibb County is mostly rural. In 2000, it had a reported population of 21,516 (USDC, 2001). The main communities in Bibb County are Centreville, Brent, West Blocton, and Woodstock. Most of the acreage in the county is used as woodland. A significant amount, however, is used for hay and pastureland.

About 75 percent of Bibb County is in the Southern Coastal Plain, about 18 percent is in the Appalachian Plateau (Sand Mountain), and about 7 percent is in the Limestone Valleys and Uplands. In Bibb County, the elevation ranges from about 175 feet above sea level in the southern part of the county to about 700 feet above sea level in the northern part.

Farming is not a major economic enterprise in the county but is still very important. The climate favors cash-grain and livestock farming. The major crops are corn, cotton, and wheat. The major kinds of livestock are various beef cattle.

Natural gas wells are scattered throughout the county (fig. 2).

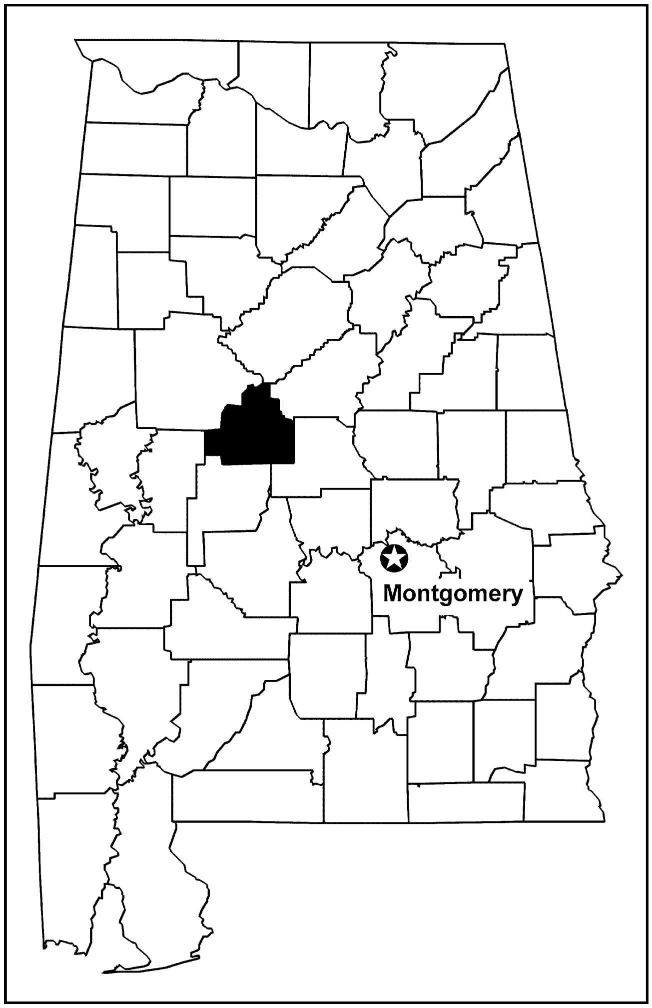


Figure 1.—Location of Bibb County in Alabama.

Early History

Bibb County was created by the Alabama Territorial Legislature on February 7, 1818. It was one of the first 13 counties to be added to the 7 already existing when Alabama was still a part of the Mississippi Territory. Originally, it was called Cahaba (spelled Cahawba for many years) to preserve the name given it by the Choctaw Indians. On December 4, 1820, the State Legislature renamed it in honor of the late Governor William Wyatt Bibb. As it was then constituted, Bibb County contained much of what is now the southern part of Shelby County and the western part of Chilton County.

The northern part of Bibb County was once very active with coal mining operations. Marvel, West Blocton, and Woodstock were popular communities during the coil mining era. Thousands of tons of coal were brought up from beneath the ground from the Cahaba River Basin Fields, which were some of the richest fields in the state and the South. The coal was a high grade that could be used for both heating and steel production.

The coal was processed in Brierfield, Helena, and surrounding ironworks. The Brierfield Rolling Mill located in Bibb County had a daily production capacity of 10 tons in 1864. The Confederate government purchased the furnace from the Bibb County Iron Company in 1863 and soon added a second furnace and rolling mill. In March 1865, the Union 10th Cavalry burned the Brierfield Ironworks.

Figure 2.—A natural gas well in an area of Nauvoo sandy loam, 2 to 8 percent slopes. Such wells are commonly constructed on narrow ridges.

Climate

Prepared by the Natural Resources Conservation Service National Water and Climate Center, Portland, Oregon.

The climate data in tables 1, 2, and 3 are from a climate station at Centreville, Alabama. Thunderstorm days, relative humidity, percent sunshine, and wind information are estimated from a first order station at Birmingham, Alabama.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Centreville in the period 1971 to 2000. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, the average temperature is 45.6 degrees F and the average daily minimum temperature is 34.5 degrees. The lowest temperature on record, which occurred at Centreville on January 21, 1985, is -6 degrees. In summer, the average temperature is 78.7 degrees and the average daily maximum temperature is 89.7 degrees. The highest temperature, which occurred at Centreville on July 15, 1980, is 105 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The average annual total precipitation is about 58.60 inches. Of this, about 37.37 inches, or 64 percent, usually falls in March through October. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 5.79 inches at Centreville on January 18, 1987. Thunderstorms occur on about 59 days each year, and most occur in July.

The average seasonal snowfall is 1.3 inches. The greatest snow depth at any one time during the period of record was 8 inches recorded on March 13, 1993. On an average, 1 day per year has at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 6.7 inches recorded on March 13, 1993.

The average relative humidity in mid-afternoon is about 56 percent. Humidity is higher at night, and the average at dawn is about 85 percent. The sun shines 62 percent of the time in summer and 46 percent in winter. The prevailing wind is from the north. Average wind speed is highest, 8.9 miles per hour, in March.

How This Survey Was Made

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

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

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

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

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

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

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

General Soil Map Units

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

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

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

Each map unit is rated for cultivated crops, pasture and hay, forestland, and urban uses. Cultivated crops are those typically grown in the survey area. Pasture and hay refer to improved locally grown grasses and legumes. Forestland refers to areas of native or introduced trees. Urban uses include residential, commercial, and industrial developments.

The boundaries of the general soil map units in Bibb County was matched, where possible, with those of previously completed surveys from Chilton, Hale, Jefferson, Perry, Shelby, and Tuscaloosa Counties, Alabama. In some areas, however, the lines do not join and the names of the map units differ. These differences result mainly because of changes in soil series concepts, difference in map unit design, and changes in soil patterns near survey area boundaries.

1. Luverne-Smithdale

Dominantly gently sloping to very steep, well drained soils that have a loamy or sandy surface layer and a clayey or loamy subsoil; on uplands

Setting

Location in the survey area: Eastern, central, and northwestern parts
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Luverne—convex summits, shoulder slopes, and side slopes; Smithdale—convex summits, shoulder slopes, side slopes, and knolls
Slope: Dominantly 2 to 35 percent, but ranges from 2 to 45 percent

Composition

Percent of the survey area: 38 percent
Luverne soils: 50 percent
Smithdale soils: 40 percent

Minor soils: 10 percent, including Bama, Bibb, Colwell, Conecuh, Iuka, and Kinston soils.

Soil Characteristics

Luverne
Surface layer: Dark grayish brown sandy loam
Subsurface layer: Yellowish brown sandy loam
Subsoil: Upper part—red clay; lower part—yellowish red sandy clay loam
Substratum: Mottled reddish, brownish, and grayish sandy clay loam that has a few thin strata of sandy material
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 2 to 45 percent
Parent material: Stratified clayey and loamy sediments

Smithdale
Surface layer: Brown sandy loam
Subsurface layer: Yellowish brown sandy loam and strong brown sandy clay loam
Subsoil: Upper part—red sandy clay loam; lower part—strong brown sandy loam
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 2 to 45 percent
Parent material: Loamy and sandy sediments

Minor Soils

- Scattered areas of loamy Bama and clayey Colwell soils on broad ridges at the slightly higher elevations
- The moderately well drained Iuka and poorly drained Bibb and Kinston soils on narrow and broad flood plains
- The moderately well drained, clayey Conecuh soils on gently sloping and moderately sloping ridges and side slopes

Use and Management

Major uses: Forestland, wildlife habitat, and pasture

Cropland
Management concerns: Erodibility, low fertility, slope in the steeper areas, and restricted use of equipment

Pasture and hayland
Management concerns: Erodibility, low fertility, slope in the steeper areas, and restricted use of equipment

Forestland
Management concerns: Plant competition, erodibility, and restricted use of equipment

Urban development
Management concerns: Luverne—restricted permeability, low strength, shrink-swell potential, and slope in the steeper areas; Smithdale—slope in the steeper areas and seepage

2. Mantachie-Iuka-Kinston

Dominantly level, somewhat poorly drained, moderately well drained, and poorly drained soils that have a loamy surface layer and subsoil or have a loamy or sandy substratum; on lower parts of flood plains

Setting

Location in the survey area: South-central part
Landscape: Coastal Plain
Landform: Flood plains
Landform position: Mantachie—slightly convex slopes at intermediate elevations on the flood plains; Iuka—convex slopes on high and intermediate parts of natural levees; Kinston—flat or slightly concave slopes on the lower parts of the flood plains
Slope: 0 to 1 percent

Composition

Percent of the survey area: 3.0 percent
Mantachie soils: 35 percent
Iuka soils: 30 percent
Kinston soil: 25 percent
Minor soils: 10 percent, including Bibb, Cahaba, and Columbus soils and Fluvaquents

Soil Characteristics

Mantachie
Surface layer: Very dark grayish brown fine sandy loam
Subsoil: Upper part—light brownish gray sandy clay loam that has brownish and grayish mottles; lower part—light gray sandy clay loam that has reddish, brownish, and yellowish mottles
Depth class: Very deep
Drainage class: Somewhat poorly drained
Seasonal high water table: Apparent, at a depth of 1 to $1^1/_2$ feet from December through April
Slope: 0 to 1 percent
Parent material: Loamy alluvium

Iuka
Surface layer: Brown fine sandy loam
Substratum: Upper part—strong brown sandy loam; lower part—light brownish gray loam that has brownish mottles
Depth class: Very deep
Drainage class: Moderately well drained
Seasonal high water table: Apparent, at a depth of 1 to 3 feet from December through April
Slope: 0 to 1 percent
Parent material: Stratified loamy and sandy alluvium

Kinston
Surface layer: Black loam
Subsoil: Upper part—dark gray sandy clay loam that has brownish mottles; lower part—gray sandy clay loam that has brownish mottles
Substratum: Gray sandy clay loam that has brownish mottles
Drainage class: Poorly drained

Depth class: Very deep
Seasonal high water table: Apparent, at the surface to a depth of 1 foot from December through April
Slope: 0 to 1 percent
Parent material: Stratified loamy and sandy alluvium

Minor Soils

- The well drained Cahaba and moderately well drained Columbus soils on remnants of low stream terraces
- The poorly drained Bibb soils on narrow flood plains
- Scattered areas of the very poorly drained Fluvaquents in depressions

Use and Management

Major uses: Forestland and wildlife habitat

Cropland
Management concerns: Flooding and wetness

Pasture and hayland
Management concerns: Flooding and wetness

Forestland
Management concerns: Plant competition, restricted use of equipment, and seedling mortality

Urban development
Management concerns: Flooding, wetness, and low strength

3. Bama-Columbus-Cahaba-Savannah

Nearly level to gently sloping, moderately well drained and well drained soils that have a loamy surface layer and subsoil; on stream terraces

Setting

Location in the survey area: Southern part adjacent to the Cahaba River
Landscape: Coastal Plain
Landform: Bama—high stream terraces; Columbus—low stream terraces; Cahaba—low stream terraces; Savannaha—stream terraces
Landform position: Bama—summits; Columbus—flat to slightly convex slopes; Cahaba—convex slopes on summits; Savannah—uplands and terraces ranging from nearly level to moderately sloping
Slope: 0 to 5 percent

Composition

Percent of the survey area: 5.0 percent
Bama soils: 33 percent
Columbus soils: 28 percent
Cahaba soils: 21 percent
Savannah soils: 8 percent
Minor soils: 10 percent, including Annemaine, Bibb, Iuka, Kinston, Lucedale, Mantachie, and Myatt soils

Soil Characteristics

Bama
Surface layer: Brown and dark brown fine sandy loam
Subsoil: Upper part—red sandy clay loam; lower part—red sandy loam

Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 0 to 5 percent
Parent material: Loamy sediments

Columbus
Surface layer: Dark yellowish brown loam
Subsoil: Upper part—strong brown clay loam that has brownish mottles; lower part—strong brown sandy clay loam and sandy loam having red and strong brown mottles
Depth class: Very deep
Drainage class: Moderately well drained
Seasonal high water table: Apparent, at a depth of $1^{1}/_{2}$ to $2^{1}/_{2}$ feet from January through April
Slope: 0 to 2 percent
Parent material: Loamy, fluvial sediments

Cahaba
Surface layer: Dark brown sandy loam and brown fine sandy loam
Subsurface layer: Red fine sandy loam
Subsoil: Upper part—red sandy clay loam; lower part—red sandy loam
Substratum: Red sandy loam
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 0 to 5 percent
Parent material: Loamy and sandy sediments

Savannah
Surface layer: Brown silt loam
Subsoil: Upper part—dark yellowish brown loam; next part—yellowish brown loam that has brownish and grayish mottles; lower part—strong brown clay loam that has brownish and grayish mottles
Depth class: Moderately deep to a root restricting fragipan
Drainage class: Moderately well drained
Seasonal high water table: Perched, at a depth of $1^{1}/_{2}$ to 3 feet from January through March
Slope: 0 to 5 percent
Parent material: Loamy, marine sediments

Minor Soils

- The dark red, loamy Lucedale soils on broad ridges at slightly higher elevations than the Bama and Savannah soils
- The clayey, moderately well drained Annemaine and poorly drained Myatt soils on low terraces
- The poorly drained Bibb and Kinston, moderately well drained Iuka, and somewhat poorly drained Mantachie soils on flood plains

Use and Management

Major uses: Forestland, wildlife habitat, and pasture

Cropland
Management concerns: Bama and Savannah—erodibility and fertility; Columbus—flooding and wetness; Cahaba—no significant concerns

Pasture and hayland
Management concerns: Bama—fertility; Columbus—flooding, wetness, and fertility; Cahaba—no significant concerns; Savannah—wetness and fertility

Forestland
Management concerns: No significant concerns

Urban development
Management concerns: Columbus—flooding and wetness; Cahaba—flooding; Savannah—wetness

4. Nauvoo-Sipsey-Townley-Sunlight

Dominantly gently sloping to very steep, well drained and somewhat excessively well drained soils that have a loamy surface layer and a loamy or clayey subsoil; formed in material weathered from sandstone and shale

Setting

Location in the survey area: Northeastern part
Landscape: Ridge and Valley; Sand Mountain
Landform: Hillslopes and narrow ridges
Landform position: Nauvoo—summits, shoulder slopes, and knolls; Sipsey—backslopes and footslopes; Townley—summits and backslopes; Sunlight—side slopes
Slope: 2 to 35 percent
Parent material: Sandstone and shale

Composition

Percent of the survey area: 17 percent
Nauvoo soils: 35 percent
Sipsey soils: 28 percent
Townley soils: 10 percent
Sunlight soils: 7 percent
Minor soils: 20 percent, including Bibb, Brilliant, Gorgas, Iuka, Montevallo, and Palmerdale soils

Soil Characteristics

Nauvoo
Surface layer: Dark yellowish brown sandy loam
Subsurface layer: Brownish yellow sandy loam
Subsoil: Upper part—reddish yellow loam; next part—red clay loam; lower part—red sandy clay loam that has brownish and yellowish mottles
Bedrock layer: Highly weathered sandstone
Depth class: Deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 2 to 35 percent
Parent material: Interbedded sandstone and shale

Sipsey
Surface layer: Dark yellowish brown sandy loam
Subsurface layer: Yellowish brown sandy loam
Subsoil: Yellowish red sandy clay loam
Bedrock layer: Highly weathered sandstone

Depth class: Moderately deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 6 to 35 percent
Parent material: Weathered sandstone

Townley
Surface layer: Dark grayish brown silt loam
Subsurface layer: Yellowish brown silt loam
Subsoil: Strong brown silty clay and silty clay loam
Bedrock layer: Weathered shale
Depth class: Moderately deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 15 to 35 percent
Parent material: Shale and siltstone

Sunlight
Surface layer: Very dark grayish brown channery sandy loam
Subsurface layer: Brown channery sandy loam
Subsoil: Reddish yellow extremely channery loam
Bedrock layer: Weathered, interbedded sandstone and shale
Depth class: Shallow
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 15 to 35 percent
Parent material: Interbedded sandstone and shale

Minor Soils

- The somewhat excessively drained Brilliant and Palmerdale soils in areas of mine spoil
- Gorgas soils on the steeper slopes that have sandstone rock outcrops and boulders
- The somewhat excessively well drained Montevallo soils in the steeper shaley areas
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways

Use and Management

Major uses: Forestland, pasture, and wildlife habitat (fig. 3)

Cropland
Management concerns: Nauvoo, Sipsey, and Townley—erodibility and low fertility

Pasture and hayland
Management concerns: Nauvoo and Sipsey—erodibility, equipment use, and fertility; Townley and Sunlight—equipment use, erodibility, and depth to bedrock

Forestland
Management concerns: Nauvoo, Sipsey, and Townley—equipment use, seedling survival, and plant competition

Wildlife habitat
Management concerns: Nauvoo and Sipsey—erodibility and equipment use

Urban development
Management concerns: Nauvoo—steepness of slope; Sipsey and Townley—restricted permeability, shrink-swell potential, steepness of slope, and depth to rock

Figure 3.—An area of general soil map unit 4, Nauvoo-Sipsey-Townley-Sunlight. Areas of this map unit are in the northeastern part of the county. The soils are suited to loblolly pine and are used primarily for forestland, pasture, and wildlife habitat.

5. Maubila-Smithdale

Dominantly gently sloping to very steep, moderately well drained and well drained soils that have a loamy surface layer and a loamy or clayey subsoil; on uplands

Setting

Location in the survey area: Central part
Landscape: Coastal Plain
Landform: Hillslopes and narrow ridges
Landform position: Convex summits, shoulder slopes, side slopes, and knolls
Slope: 2 to 45 percent

Composition

Percent of the survey area: 29 percent
Maubila soils: 45 percent
Smithdale soils: 30 percent
Minor soils: 25 percent, including Bibb, Boykin, Iuka, Kinston, Luverne, Mantachie, Saffall, and Wadley soils

Soil Characteristics

Maubila
Surface layer: Dark yellowish brown flaggy loam
Subsoil: Upper part—yellowish red clay; next part—yellowish red clay that has brownish mottles; lower part—mottled reddish, brownish, yellowish, and grayish sandy clay loam and silty clay
Substratum: Mottled reddish, brownish, yellowish, and grayish clay that has strata of sandy clay and clay loam
Depth class: Very deep
Drainage class: Moderately well drained
Seasonal high water table: Perched, at a depth of 2 to 3$^1/_2$ feet from January through April
Slope: 2 to 45 percent
Parent material: Stratified clayey and loamy, marine sediments

Smithdale
Surface layer: Brown sandy loam
Subsurface layer: Yellowish brown sandy loam and strong brown sandy clay loam
Subsoil: Upper part—red sandy clay loam; lower part—yellowish red and strong brown sandy loam
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 2 to 45 percent
Parent material: Loamy and sandy sediments

Minor Soils

- Scattered areas of the well drained, clayey Luverne soils
- The sandy Boykin and Wadley soils on summits, side slopes, and footslopes
- The moderately well drained Iuka, somewhat poorly drained Mantachie, and poorly drained Bibb and Kinston soils on narrow and broad flood plains
- The well drained Saffell soils on footslopes

Use and Management

Major uses: Forestland and pasture

Cropland
Management concerns: Erodibility, low fertility, droughtiness, and slope in the steeper areas

Pasture and hayland
Management concerns: Low fertility, droughtiness, and slope in the steeper areas

Forestland
Management concerns: Erodibility, plant competition, and restricted use of equipment

Urban development
Management concerns: Maubila—slope, restricted permeability, shrink-swell potential, and low strength; Smithdale—slope and seepage

6. Bodine-Minvale-Fullerton

Very deep, moderately steep to very steep, well drained and somewhat excessively drained soils that have a loamy or clayey subsoil; formed in residuum derived from limestone and cherty limestone

Setting

Location in the survey area: East-central part
Landscape: Limestone Valleys and Uplands

Landform: Hillslopes, ridges, and side slopes
Landform position: Smooth and concave side slopes; footslopes
Slope: 2 to 50 percent

Composition

Percent of the survey area: 7 percent
Bodine soils: 43 percent
Minvale soils: 30 percent
Fullerton soils: 2 percent
Minor soils: 25 percent, including Barfield, Bibb, Choccolocco, Iuka, Kinston, and Mantachie soils

Soil Characteristics

Bodine
Surface layer: Dark grayish brown very gravelly silt loam
Subsoil: Upper part—yellowish brown and brown extremely gravelly silt loam; lower part—strong brown extremely gravelly silty clay loam
Depth class: Very deep
Drainage class: Somewhat excessively drained
Seasonal high water table: None within a depth of 6 feet
Slope: 6 to 50 percent
Parent material: Residuum and colluvium from cherty limestone

Minvale
Surface layer: Brown gravelly silt loam
Subsurface layer: Light yellowish brown gravelly silt loam
Subsoil: Upper part—strong brown gravelly silty clay loam; lower part—red and yellowish red very gravelly silty clay loam
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 2 to 50 percent
Parent material: Residuum and colluvium from cherty limestone

Fullerton
Surface layer: Dark brown gravelly silt loam
Subsoil: Upper part—red gravelly silty clay loam; lower part—red gravelly clay
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: None within a depth of 6 feet
Slope: 6 to 15 percent
Parent material: Residuum and colluvium from cherty limestone

Minor Soils

- The shallow, clayey Barfield soils in very steep areas underlain by limestone
- The well drained Choccolocco soils on low stream terraces and on flood plains along large creeks or rivers
- The moderately well drained Iuka, somewhat poorly drained Mantachie, and poorly drained Bibb and Kinston soils on flood plains and in drainageways

Use and Management

Major uses: Forestland and pastureland

Cropland
Management concerns: Erodibility on the steeper slopes and low available water capacity

Pasture and hayland
Management concerns: Erodibility on the steeper slopes and low available water capacity

Forestland
Management concerns: None

Urban development
Management concerns: Slope is a severe limitation.

7. Ochlockonee-Riverview

Very deep, well drained soils on the flood plains along the Cahaba River and other large streams throughout the county

Setting

Location in the survey area: Southern part
Landscape: Coastal Plains
Landform: Flood plains
Landform position: Flood plains
Slope: 0 to 5 percent

Composition

Percent of the survey area: 1.0 percent
Ochlockonee soils: 60 percent
Riverview soils: 30 percent
Minor soils: 10 percent, including Annemaine, Cahaba, and Minter soils

Soil Characteristics

Ochlockonee
Surface layer: Brown and dark yellowish brown loamy sand
Substratum: Upper part—stratified dark yellowish brown and yellowish brown sandy loam and loamy sand; lower part—stratified pale yellow loamy sand
Drainage class: Well drained
Seasonal high water table: Apparent, at a depth of 3 to 5 feet from December through April
Slope: 0 to 2 percent
Parent material: Stratified loamy and sandy alluvium

Riverview
Surface layer: Brown sandy loam
Subsoil: Strong brown sandy clay loam
Substratum: Upper part—brownish yellow sandy loam; lower part—brownish yellow fine sandy loam
Depth class: Very deep
Drainage class: Well drained
Seasonal high water table: Apparent, at a depth of 3 to 5 feet from December through April
Slope: 0 to 2 percent
Parent material: Loamy and sandy alluvium

Minor Soils

- The well drained Cahaba and moderately well drained Annemaine soils on knolls and remnants of low stream terraces
- The poorly drained Minter soils in old oxbows and in sloughs on flood plains
- The very poorly drained Fluvaquents in depressions

Use and Management

Major uses: Woodland and wildlife habitat

Cropland
Management concerns: Flooding

Pasture and hayland
Management concerns: Flooding

Forestland
Management concerns: Plant competition and restricted use of equipment

Urban development
Management concerns: Flooding and wetness

Detailed Soil Map Units

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

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

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

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

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. The soils of a given 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, Bama fine sandy loam, 2 to 5 percent slopes, is a phase of the Bama series.

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

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Maubila-Smithdale complex, 15 to 35 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded, is an undifferentiated group in this survey area.

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

Table 4 gives the acreage and proportionate extent of each map unit in this survey area. 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.

AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Low stream terraces
Landform position: Convex slopes
Shape of areas: Oblong
Size of areas: 10 to 200 acres

Composition

Annemaine and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 4 inches—brown silt loam

Subsoil:
4 to 17 inches—yellowish red clay loam
17 to 35 inches—yellowish red silty clay loam
35 to 48 inches—mottled dark yellowish brown, brown, strong brown, and gray loam

Substratum:
48 to 80 inches—mottled brownish yellow, strong brown, and gray sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: High
Seasonal high water table: Apparent, at a depth of 1$^1/_2$ to 2$^1/_2$ feet from January through April
Shrink-swell potential: Moderate

Flooding: Rare
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:

- Columbus soils, which have a loamy subsoil, in the slightly lower positions
- The well drained Cahaba soils in the slightly higher, more convex positions
- The somewhat poorly drained Mantachie and poorly drained Bibb soils in narrow drainageways and swales
- The poorly drained Minter and Myatt in small depressions

Similar soils:

- Scattered areas of soils that have a lower content of clay in the subsoil than the Annemaine soil
- Scattered areas of Annemaine soils that have a surface layer of loamy sand

Land Use

Dominant uses: Cropland and forestland
Other uses: Pasture, hayland, and wildlife habitat

Cropland
Suitability: Well suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: Wetness
Management measures and considerations:

- Using well maintained open ditches to remove excess water improves productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: Wetness
Management measures and considerations:

- Using well maintained open ditches to remove excess water improves productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants
Management measures and considerations:

- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.

- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding, shrink-swell potential, and wetness
Management measures and considerations:
- A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding, wetness, and restricted permeability
Management measures and considerations:
- This map unit is very limited as a site for septic tank absorption fields because of the flooding, wetness, and slow permeability.
- Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding, wetness, low strength, and shrink-swell potential
Management measures and considerations:
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
- Well-compacted fill material can be used as a road base to elevate roads above the level of the flooding.

Interpretive Groups

Land capability classification: 2w
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded

Setting

Landform: Low stream terraces
Landform position: Convex slopes
Shape of areas: Oblong
Size of areas: 10 to 150 acres

Composition

Annemaine and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 4 inches—brown silt loam

Subsoil:
4 to 17 inches—yellowish red clay loam
17 to 35 inches—yellowish red silty clay loam
35 to 48 inches—mottled dark yellowish brown, brown, strong brown, and gray loam

Substratum:
48 to 80 inches—mottled brownish yellow, strong brown, and gray sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: High
Seasonal high water table: Apparent, at a depth of $1^1/_2$ to $2^1/_2$ feet from January through April
Shrink-swell potential: Moderate
Flooding: Rare
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Columbus soils in shallow swales
- The well drained Cahaba soils in the slightly higher, more convex positions
- The somewhat poorly drained Mantachie and poorly drained Bibb soils in narrow drainageways and swales
- The poorly drained Minter soils in small depressions

Similar soils:
- Scattered areas of soils that have a lower content of clay in the subsoil than the Annemaine soil
- Scattered areas of Annemaine soils that have a surface layer of loamy sand

Land Use

Dominant uses: Cropland and forestland
Other uses: Pasture, hayland, and wildlife habitat

Cropland
Suitability: Well suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: Wetness
Management measures and considerations:
- Using well maintained open ditches to remove excess water improves productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: Wetness
Management measures and considerations:
- Using well maintained open ditches to remove excess water improves productivity.

- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants
Management measures and considerations:
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding, shrink-swell potential, and wetness
Management measures and considerations:
- A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding, wetness, and restricted permeability
Management measures and considerations:
- This map unit is very limited as a site for septic tank absorption fields because of the flooding, wetness, and slow permeability.
- Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding, wetness, low strength, and shrink-swell potential
Management measures and considerations:
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
- Well-compacted fill material can be used as a road base to elevate roads above the level of the flooding.

Interpretive Groups

Land capability classification: 2e

Prime farmland status: Prime farmland
Hydric soil status: Not hydric

BaA—Bama fine sandy loam, 0 to 2 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Summits
Shape of areas: Irregular
Size of areas: 15 to 200 acres

Composition

Bama and similar soils: 95 percent
Dissimilar soils: 5 percent

Typical Profile

Surface layer:
0 to 6 inches—brown fine sandy loam
6 to 10 inches—dark brown fine sandy loam

Subsoil:
10 to 72 inches—red sandy clay loam
72 to 80 inches—red sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The moderately well drained Savannah soils, which are at the slightly lower elevations and have a fragipan
- The clayey Colwell soils, which have a dark red subsoil

Similar soils:
- Scattered areas of Bama soils that have a surface layer of loam
- Scattered areas of Bama soils that have gravelly strata below a depth of 60 inches
- Scattered areas of Lucedale soils, which have dark red colors throughout the subsoil
- Scattered areas of Smithdale soils, which have a significant decrease in clay content in the lower part of the subsoil

Land Use

Dominant uses: Cropland, pasture, and hayland (fig. 4)
Other uses: Forestland and homesites

Figure 4.—An area of Bama fine sandy loam, 0 to 2 percent slopes. This well drained, loamy soil is well suited to bahiagrass and bermudagrass hay.

Cropland

Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: No significant limitations affect management of cropland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland

Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat

Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.

- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 1
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

BaB—Bama fine sandy loam, 2 to 5 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Shoulder slopes and side slopes
Shape of areas: Irregular
Size of areas: 15 to 200 acres

Composition

Bama and similar soils: 95 percent
Dissimilar soils: 5 percent

Typical Profile

Surface layer:
0 to 6 inches—brown fine sandy loam
6 to 10 inches—dark brown fine sandy loam

Subsoil:
10 to 72 inches—red sandy clay loam
72 to 80 inches—red sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low

Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Bama soils that have a slope of less than 2 percent or more than 5 percent
- Scattered areas of Boykin soils, which are sandy over loamy

Similar soils:
- Scattered areas of Bama soils that have a surface layer of loam
- Scattered areas of Bama soils that have gravelly strata below a depth of 60 inches
- Scattered areas of Lucedale soils, which have dark red colors throughout the subsoil
- Scattered areas of Smithdale soils, which have a significant decrease in clay content in the lower part of the subsoil

Land Use

Dominant uses: Cropland, pasture, and hayland
Other uses: Forestland and homesites

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.

- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Flood plains
Landform position: Bibb—concave slopes in backswamps; Iuka—convex slopes on high and intermediate parts of natural levees
Shape of areas: Long and narrow
Size of areas: 10 to 500 acres

Composition

Bibb and similar soils: 50 percent
Iuka and similar soils: 35 percent
Dissimilar soils: 15 percent

Typical Profiles

Bibb
Surface layer:
0 to 2 inches—dark brown sandy loam that has yellowish red mottles
2 to 8 inches—grayish brown sandy loam that has yellowish red mottles

Substratum:
8 to 55 inches—light brownish gray and grayish brown sandy loam that has reddish and brownish mottles
55 to 80 inches—gray loamy sand

Iuka
Surface layer:
0 to 3 inches—brown fine sandy loam

Substratum:
3 to 36 inches—yellowish brown and strong brown sandy loam that has brownish and grayish mottles
36 to 46 inches—brown sandy loam
46 to 80 inches—light brownish gray and gray loam that has reddish and brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Bibb—poorly drained; Iuka—moderately well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: Bibb—apparent, at a depth of $^1/_2$ to 1 foot from December through April; Iuka—apparent, at a depth of 1 to 3 feet from December through April
Shrink-swell potential: Low
Flooding: Frequent, brief
Content of organic matter in the surface layer: Moderate
Natural fertility: Moderate
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The very poorly drained Fluvaquents, which are in depressions and are subject to long-duration ponding
- The somewhat poorly drained Mantachie soils in the broader positions on the flood plains

Similar soils:
- Scattered areas of Bibb and Iuka soils that have thin strata of reddish, sandy or loamy materials in the surface layer or substratum
- Scattered areas of Kinston soil, which has a higher content of clay in the upper part of the subsoil and substratum than the Bibb soil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Management concerns: Flooding and wetness
Management measures and considerations:
- This map unit is severely limited for crop production because of the flooding and wetness.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Common bermudagrass, bahiagrass, and white clover
Management concerns: Flooding and wetness
Management measures and considerations:
- Although most of the flooding occurs during winter and spring, livestock and hay may be damaged during any time of the year.
- Well maintained drainageways and ditches help to remove excess water.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.

Forestland
Suitability: Suited
Productivity class: Very high for loblolly pine and hardwoods
Management concerns: Equipment use, seedling survival, and competition from undesirable plants

Management measures and considerations:
- Restricting the use of standard wheeled and tracked equipment to dry periods helps to prevent rutting and compaction.
- Harvesting timber during the summer or fall reduces the risk of damage from flooding.
- Bedding the Bibb soil prior to planting helps to establish seedlings and increases the seedling survival rate.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water, thereby improving aquatic habitat.

Wildlife habitat

Potential of the Bibb soil to support habitat for: Openland wildlife and forestland wildlife—fair; wetland wildlife—good

Potential of the Iuka soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—poor

Management concerns: Equipment use, flooding, and wetness

Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development

Suitability: Unsuited

Management concerns: Flooding and wetness

Management measures and considerations:
- This map unit is severely limited as a site for urban development because of the flooding and wetness.
- A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: 5w

Prime farmland status: Not prime farmland

Hydric soil status: Bibb—yes; Iuka—no

BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony

Setting

Landform: Hillslopes

Landform position: Side slopes

Shape of areas: Irregular

Size of areas: 25 to 250 acres

Composition

Bodine and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:
0 to 6 inches—brown very gravelly silt loam

Subsurface layer:
6 to 14 inches—yellowish brown very gravelly silt loam

Subsoil:
14 to 38 inches—yellowish brown and brown extremely gravelly silt loam
38 to 58 inches—strong brown extremely gravelly silt loam
58 to 80 inches—strong brown extremely gravelly silty clay loam that has reddish and grayish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid
Available water capacity: Low
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The well drained Minvale soils on ridges and shoulder slopes
- The clayey Fullerton soils on the lower parts of slopes
- Bodine soils that have a slope of less than 6 percent or more than 15 percent

Similar soils:
- Scattered areas of a Bodine soil that has a surface layer of fine sandy loam or silty clay loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture, hayland, and homesites

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Terraces and diversions, contour farming, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited to pasture; suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass

Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—fair; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Installing distribution lines on the contour improves the performance of the system.

Local roads and streets
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 4s
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony

Setting

Landform: Hillslopes
Landform position: Hillslopes
Shape of areas: Irregular
Size of areas: 40 to 600 acres

Composition

Bodine and similar soils: 50 percent
Minvale and similar soils: 40 percent
Dissimilar soils: 10 percent

Typical Profiles

Bodine
Surface layer:
0 to 6 inches—dark grayish brown very gravelly silt loam

Subsurface layer:
6 to 14 inches—yellowish brown very gravelly silt loam

Subsoil:
14 to 38 inches—yellowish brown and brown extremely gravelly silt loam
38 to 58 inches—strong brown extremely gravelly silt loam
58 to 80 inches—strong brown extremely gravelly silty clay loam that has reddish and grayish mottles

Minvale
Surface layer:
0 to 7 inches—brown gravelly silt loam

Subsurface layer:
7 to 13 inches—light yellowish brown gravelly silt loam

Subsoil:
13 to 17 inches—light yellowish brown gravelly silt loam that has strong brown mottles
17 to 37 inches—strong brown gravelly silty clay loam
37 to 80 inches—red and yellowish red very gravelly silty clay loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Bodine—somewhat excessively drained; Minvale—well drained
Permeability: Bodine—moderately rapid; Minvale—moderate
Available water capacity: Bodine—low; Minvale—moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Fullerton soils on shoulder slopes or footslopes
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways

- Bodine and Minvale soils that have a slope of less of than 15 percent or more than 35 percent

Similar soils:
- Scattered areas of well drained, loamy soils that have a reddish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: Very high for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control the hazard of erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small

tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Minvale soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: Bodine—7s; Minvale—7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony

Setting

Landform: Hillslopes
Landform position: Hillslopes
Shape of areas: Irregular
Size of areas: 40 to 200 acres

Composition

Bodine and similar soils: 60 percent
Minvale and similar soils: 30 percent
Dissimilar soils: 10 percent

Typical Profiles

Bodine
Surface layer:
0 to 6 inches—dark grayish brown very gravelly silt loam

Subsurface layer:
6 to 14 inches—yellowish brown very gravelly silt loam

Subsoil:
14 to 38 inches—yellowish brown and brown extremely gravelly silt loam
38 to 58 inches—strong brown extremely gravelly silt loam
58 to 80 inches—strong brown extremely gravelly silty clay loam that has reddish and grayish mottles

Minvale
Surface layer:
0 to 7 inches—brown gravelly silt loam

Subsurface layer:
7 to 13 inches—light yellowish brown gravelly silt loam

Subsoil:
13 to 17 inches—light yellowish brown gravelly silt loam that has strong brown mottles
17 to 37 inches—strong brown gravelly silty clay loam
37 to 80 inches—red and yellowish red very gravelly silty clay loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Bodine—somewhat excessively drained; Minvale—well drained
Permeability: Bodine—moderately rapid; Minvale—moderate
Available water capacity: Bodine—low; Minvale—moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Fullerton soils on shoulder slopes or footslopes
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Bodine and Minvale soils that have a slope of less of than 35 percent or more than 50 percent

Similar soils:
- Scattered areas of well drained, loamy soils that have a reddish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Unsuited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use

Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: Very high for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control the hazard of erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited

Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: Bodine—7s; Minvale—7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Low stream terraces
Landform position: Convex slopes
Shape of areas: Oblong
Size of areas: 10 to 150 acres

Composition

Cahaba and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 3 inches—dark brown sandy loam
3 to 6 inches—brown fine sandy loam

Subsurface layer:
6 to 13 inches—red fine sandy loam

Subsoil:
13 to 30 inches—red sandy clay loam
30 to 44 inches—red sandy clay loam that has brownish mottles
44 to 56 inches—red sandy loam

Substratum:
56 to 80 inches—red sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: Rare
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The clayey Annemaine soils in positions similar to those of the Cahaba soil
- The moderately well drained Columbus soils in the slightly lower, less convex positions

Similar soils:
- Scattered areas of soils that have a lower content of clay in the subsoil than the Cahaba soil
- Scattered areas of Cahaba soils that have a surface layer of loamy sand

Land Use

Dominant uses: Cropland and forestland
Other uses: Pasture, hayland, and wildlife habitat

Cropland
Suitability: Well suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: No significant limitations affect management of cropland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding
Management measures and considerations:
- Building on the highest part of the landscape reduces the risk of damage from the flooding.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding

Management measures and considerations:
- This map unit is severely limited as a site for septic tank absorption fields because of the flooding.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Flooding
Management measures and considerations:
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 1
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded

Setting

Landform: Low stream terraces
Landform position: Convex slopes
Shape of areas: Oblong
Size of areas: 10 to 150 acres

Composition

Cahaba and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 3 inches—dark brown sandy loam
3 to 6 inches—brown fine sandy loam

Subsurface layer:
6 to 13 inches—red fine sandy loam

Subsoil:
13 to 30 inches—red sandy clay loam
30 to 44 inches—red sandy clay loam that has brownish mottles
44 to 56 inches—red sandy loam

Substratum:
56 to 80 inches—red sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: Rare
Content of organic matter in the surface layer: Low

Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The clayey Annemaine soils in positions similar to those of the Cahaba soils
- The moderately well drained Columbus soils in the slightly lower, less convex positions

Similar soils:
- Scattered areas of soils that have a lower content of clay in the subsoil than the Cahaba soil
- Scattered areas of Cahaba soils that have a surface layer of loamy sand

Land Use

Dominant uses: Cropland and forestland
Other uses: Pasture, hayland, and wildlife habitat

Cropland
Suitability: Well suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: No significant limitations affect management of cropland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding

Management measures and considerations:
- Building on the highest part of the landscape reduces the risk of damage from the flooding.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding
Management measures and considerations:
- This map unit is severely limited as a site for septic tank absorption fields because of the flooding.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Flooding
Management measures and considerations:
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded

Setting

Landform: Low stream terraces; flood plains
Landform position: Flat and slightly convex slopes
Shape of areas: Oblong
Size of areas: 15 to 300 acres

Composition

Choccolocco and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profile

Surface layer:
0 to 8 inches—brown silt loam

Subsoil:
8 to 45 inches—strong brown silty clay loam
45 to 57 inches—yellowish brown fine sandy loam that has brownish mottles

Substratum:
57 to 80 inches—dark yellowish brown sandy loam that has black stains

Soil Properties and Qualities

Depth class: Deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet

Shrink-swell potential: Low
Flooding: Occasional
Content of organic matter in the surface layer: Moderate
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Cahaba soils in the slightly higher, more convex positions
- The well drained Ochlocknee and Riverview soils in lower positions on the flood plain

Similar soils:
- Scattered areas of Choccolocco soils that have a surface layer of sandy loam or loamy sand

Land Use

Dominant uses: Forestand and pasture
Other uses: Cropland and hayland

Cropland
Suitability: Suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: Flooding
Management measures and considerations:
- Although most of the flooding occurs during winter and spring, crops may be damaged during the growing season.
- Using well maintained open ditches to remove excess water improves productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited
Commonly grown crops: Bahiagrass and bermudagrass
Management concerns: Flooding
Management measures and considerations:
- Although most of the flooding occurs during winter and spring, livestock and hay may be damaged during any time of the year.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine and hardwoods
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Harvesting timber during summer or fall reduces the risk of damage from flooding.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor

Management concerns: Flooding and wetness
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Unsuited
Management concerns: Flooding and wetness
Management measures and considerations:
- This map unit is unsuited as a site for dwellings because of the flooding and wetness.
- A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding and restricted permeability
Management measures and considerations:
- This map unit is moderately limited as a site for septic tank absorption fields because of the flooding.
- Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding and low strength
Management measures and considerations:
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 2w
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded

Setting

Landform: Low stream terraces
Landform position: Flat and slightly convex slopes

Shape of areas: Oblong
Size of areas: 15 to 300 acres

Composition

Columbus and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 9 inches—dark yellowish brown loam

Subsoil:
9 to 18 inches—strong brown clay loam
18 to 42 inches—strong brown and dark yellowish brown sandy clay loam that has brownish and grayish mottles
42 to 54 inches—strong brown sandy loam that has brownish and grayish mottles
54 to 80 inches—yellowish brown and strong brown clay loam that has reddish, brownish, and grayish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: Apparent, at a depth of 2 to 3 feet from December through April
Shrink-swell potential: Low
Flooding: Occasional, brief
Content of organic matter in the surface layer: Moderate
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Cahaba soils in the slightly higher, more convex positions
- Annemaine soils that are in positions similar to those of the Columbus soil and have a clayey subsoil

Similar soils:
- Scattered areas of Columbus soils that have a surface layer of sandy loam or loamy sand

Land Use

Dominant uses: Forestland and pasture (fig. 5)
Other uses: Cropland and hayland

Cropland
Suitability: Well suited
Commonly grown crops: Corn, soybeans, and cotton
Management concerns: Flooding and wetness
Management measures and considerations:
- Although most of the flooding occurs during winter and spring, crops may be damaged during the growing season.
- Using well maintained open ditches to remove excess water improves productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Figure 5.—An area of Columbus loam, 0 to 2 percent slopes, occasionally flooded. This loamy, moderately well drained soil is well suited to pasture grasses.

Pasture and hayland
Suitability: Suited
Commonly grown crops: Bahiagrass and bermudagrass
Management concerns: Flooding and wetness
Management measures and considerations:
• Although most of the flooding occurs during winter and spring, livestock and hay may be damaged during any time of the year.
• Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
• Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine and hardwoods
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
• Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
• Harvesting timber during summer or fall reduces the risk of damage from flooding.
• Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Flooding and wetness
Management measures and considerations:
• Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
• Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated

among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
• Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Unsuited
Management concerns: Flooding and wetness
Management measures and considerations:
• This map unit is unsuited as a site for dwellings because of the flooding and wetness.
• A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding, wetness, and restricted permeability
Management measures and considerations:
• This map unit is moderately limited as a site for septic tank absorption fields because of the flooding.
• Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
• Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
• The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding, wetness, and low strength
Management measures and considerations:
• Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
• Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 3w
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CoA—Colwell sandy loam, 0 to 2 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Summits
Shape of areas: Irregular
Size of areas: 20 to 200 acres

Composition

Colwell and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 4 inches—dark brown sandy loam
4 to 7 inches—brown sandy loam

Subsurface layer:
7 to 10 inches—dark red and red loam

Subsoil:
10 to 42 inches—dark red clay
42 to 80 inches—dark red clay that has yellowish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Scattered areas of loamy Bama and Lucedale soils
- Colwell soils that have a slope of more than 2 percent

Similar soils:
- Scattered areas of Colwell soils that have gravelly strata below a depth of 60 inches
- Scattered areas of Colwell soils that have a surface layer of sandy loam

Land Use

Dominant uses: Forestland and homesites
Other uses: Cropland, pasture, and hayland

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: No significant limitations affect management of cropland
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants
Management measures and considerations:
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Suited
Management concerns: Restricted permeability
Management measures and considerations:
- Increasing the size of the absorption field improves the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 1
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CoB—Colwell sandy loam, 2 to 5 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Shoulder slopes and side slopes
Shape of areas: Irregular
Size of areas: 20 to 250 acres

Composition

Colwell and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 4 inches—dark brown sandy loam
4 to 7 inches—brown sandy loam

Subsurface layer:
7 to 10 inches—dark red and red loam

Subsoil:
10 to 42 inches—dark red clay
42 to 80 inches—dark red clay that has reddish yellow mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The loamy Bama and Lucedale soils on shoulder slopes
- Colwell soils that have a slope of more than 5 percent

Similar soils:
- Scattered areas of Colwell soils that have gravelly strata below a depth of 60 inches
- Scattered areas of Colwell soils that have a surface layer of sandy loam or clay loam

Land Use

Dominant uses: Pasture, hayland, and forestland
Other uses: Cropland and homesites

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass, bahiagrass, and tall fescue
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants

Management measures and considerations:
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Suited
Management concerns: Restricted permeability
Management measures and considerations:
- Increasing the size of the absorption field improves the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CuB—Conecuh sandy loam, 2 to 5 percent slopes

Setting

Landform: Broad ridges
Landform position: Summits and shoulder slopes
Shape of areas: Irregular
Size of areas: 30 to 250 acres

Composition

Conecuh and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profile

Surface layer:
0 to 5 inches—brown sandy loam

Subsoil:
5 to 18 inches—yellowish red clay
18 to 25 inches—yellowish red clay that has brownish and grayish mottles
25 to 41 inches—red clay that has reddish, brownish, and grayish mottles
41 to 55 inches—mottled reddish, brownish, and grayish clay loam

Substratum:
55 to 80 inches—mottled reddish, brownish, and grayish sandy clay loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Very slow
Available water capacity: Moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: High
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Luverne soils on shoulder slopes
- The loamy, well drained Smithdale soils on knolls and shoulder slopes

Similar soils:
- Scattered areas of Conecuh soils that have a surface layer of fine sandy loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Suited
Commonly grown crops: Corn, small grains, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Contour farming, no-till planting, crop residue management, stripcropping, and sod-based rotations reduce the hazard of erosion, stabilize the soils, control surface runoff, and maximize infiltration of rainfall.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass, bahiagrass, tall fescue, red clover, and white clover
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.

- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling morality rate, and improves early seedling growth.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.

Septic tank absorption fields
Suitability: Unsuited
Management concerns: Restricted permeability
Management measures and considerations:
- This map unit is severely limited as a site for septic tank absorption fields because of the very slow permeability.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Shrink-swell potential, low strength, and cutbanks cave
Management measures and considerations:
- Removing as much of the clay that has a high shrink-swell potential as possible and increasing the thickness of the base aggregate improve soil performance.

- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to incorporate water-control structures, such as culverts, broad-based dips, and waterbars, helps to prevent slippage of cut-and-fill slopes.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded

Setting

Landform: Hillslopes
Landform position: Conecuh—lower backslopes and footslopes; Luverne—shoulder slopes and upper parts of backslopes
Shape of areas: Irregular
Size of areas: 40 to 100 acres

Composition

Conecuh and similar soils: 50 percent
Luverne and similar soils: 35 percent
Dissimilar soils: 15 percent

Typical Profiles

Conecuh
Surface layer:
0 to 5 inches—brown sandy loam

Subsoil:
5 to 12 inches—yellowish red clay
12 to 41 inches—yellowish red clay that has brownish and grayish mottles
41 to 55 inches—mottled reddish, brownish, and grayish clay loam

Substratum:
55 to 80 inches—mottled reddish, brownish, and grayish sandy clay loam

Luverne
Surface layer:
0 to 3 inches—very dark grayish brown sandy loam

Subsurface layer:
3 to 9 inches—yellowish brown sandy loam

Subsoil:
9 to 16 inches—red clay
16 to 20 inches—red clay that has brownish mottles
20 to 33 inches—red clay loam that has brownish and grayish mottles
33 to 48 inches—red clay loam and sandy clay loam having reddish, brownish, and grayish mottles

Substratum:
48 to 62 inches—red sandy clay loam with thin strata of sandy loam and reddish, brownish, and grayish mottles
62 to 80 inches—yellowish red sandy clay loam with thin strata of sandy loam and reddish, brownish, and grayish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Conecuh—moderately well drained; Luverne—well drained
Permeability: Conecuh—very slow; Luverne—moderately slow
Available water capacity: Conecuh—moderate; Luverne—high
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Conecuh—high; Luverne—moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Conecuh and Luverne soils that have a slope of less than 5 percent or more than 15 percent
- The moderately well drained Maubila soils in the higher, more dissected positions
- The loamy Smithdale soils on shoulder slopes and narrow ridges

Similar soils:
- Scattered areas of Conecuh or Luverne soils that have a surface layer of fine sandy loam or clay loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, soybeans, and grain sorghum
Management concerns: Erodibility
Management measures and considerations:
- Contour farming, no-till planting, crop residue management, stripcropping, and sod-based rotations reduce the hazard of further erosion, stabilize the soil, control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited to pasture; suited to hayland
Commonly grown crops: Bermudagrass, bahiagrass, tall fescue, red clover, and white clover
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of further erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited

Productivity class: Very high for loblolly pine
Management concerns: Equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soils.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling morality rate, and improves early seedling growth.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water, thereby improving aquatic habitat.

Wildlife habitat
Potential of the Conecuh soil to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—poor
Potential of the Luverne soil to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Shrink-swell potential and slope
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of further erosion.

Septic tank absorption fields
Suitability: Conecuh—unsuited; Luverne—poorly suited
Management concerns: Restricted permeability and slope
Management measures and considerations:
- Installing distribution lines on the contour and increasing the size of the absorption field improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Shrink-swell potential, low strength, and slope
Management measures and considerations:
- Removing as much of the clay that has a high shrink-swell potential as possible and increasing the thickness of the base aggregate improve soil performance.
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to prevent slippage of cut-and-fill slopes.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

FaA—Fluvaquents, ponded

Setting

Landform: Flood plains and low terraces
Landform position: Oxbows, sloughs, swales, and other depressional areas
Shape of areas: Round or oblong
Size of areas: 10 to 150 acres

Composition

Fluvaquents and similar soils: 95 percent
Dissimilar soils: 5 percent

Typical Profile

A typical pedon has not been selected.

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Very poorly drained
Permeability: Variable
Available water capacity: Variable
Seasonal high water table: Apparent, from 2 feet above the surface to a depth of $^1/_2$ foot from January through December
Shrink-swell potential: Variable
Flooding: Frequent
Content of organic matter in the surface layer: High
Natural fertility: Moderate
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The somewhat poorly drained Mantachie soils in the slightly higher, more convex positions

Similar soils:
- Scattered areas of poorly drained Kinston and Bibb soils that are not subject to long-duration ponding

Land Use

Dominant uses: Forestland and wildlife habitat

Cropland
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness
Management measures and considerations:
• This map unit is severely limited for crop production because of the flooding, ponding, and wetness.
• A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness
Management measures and considerations:
• This map unit is severely limited as pasture and hayland because of the flooding, ponding, and wetness.
• A site that has better suited soils should be selected.

Forestland
Suitability: Poorly suited
Productivity class: High for water tupelo and baldcypress
Management concerns: Equipment use and seedling survival
Management measures and considerations:
• Using low-pressure ground equipment helps to prevent rutting of the surface layer and the damage caused to tree roots by compaction.
• Maintaining drainageways and planting trees that are tolerant of wetness increase the seedling survival rate.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—poor; wetland wildlife—good
Management concerns: Equipment use, ponding, flooding, and wetness
Management measures and considerations:
• Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness
Management measures and considerations:
• This map unit is severely limited as a site for urban development because of the flooding, ponding, and wetness.
• A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: 7w
Prime farmland status: Not prime farmland
Hydric soil status: Hydric

FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes
Shape of areas: Irregular
Size of areas: 15 to 250 acres

Composition

Fullerton and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profile

Surface layer:
0 to 6 inches—dark brown gravelly silt loam

Subsoil:
6 to 28 inches—red gravelly silty clay loam
28 to 40 inches—red gravelly silty clay that has brownish, yellowish, and reddish mottles
40 to 80 inches—red gravelly clay that has brownish and reddish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Somewhat excessively drained Bodine soils, which are very gravelly and are in the more convex positions
- Minvale soils, which are loamy and have a brown subsoil
- Fullerton soils that have a slope of less than 6 percent or more than 15 percent

Similar soils:
- Scattered areas of Fullerton soils that have a surface layer of gravelly loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture, hayland, and homesites

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Terraces and diversions, contour farming, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited to pasture; suited to hayland

Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Installing distribution lines on the contour improves the performance of the system.

Local roads and streets
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 4e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes

Setting

Landform: Hillslopes
Landform position: Back slopes and benches
Shape of areas: Irregular
Size of areas: 50 to 400 acres

Composition

Gorgas and similar soils: 50 percent
Rock outcrop: 30 percent
Dissimilar soils: 20 percent

Typical Profile

Gorgas
Surface layer:
0 to 5 inches—brown loamy sand

Subsurface layer:
5 to 9 inches—brown sandy loam

Subsoil:
9 to17 inches—strong brown sandy loam

Underlying material:
17 to 80 inches—sandstone

Soil Properties and Qualities

Depth class: Shallow
Drainage class: Well drained
Permeability: Moderately rapid
Available water capacity: Low
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: 10 to 20 inches to level-bedded sandstone

Minor Components

Dissimilar soils:
- Scattered areas of the well drained, deep Nauvoo and moderately deep Sipsey soils in positions similar to those of the Gorgas soils
- Areas of poorly drained Bibb and moderately well drained Iuka soils on narrow flood plains
- Areas of Gorgas soils that have a slope of less than 35 percent

Similar soils:
- Scattered areas of soils that have more clay in the substratum than the Gorgas soil

Land Use

Dominant uses: Forestland and wildlife habitat (fig. 6)
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope

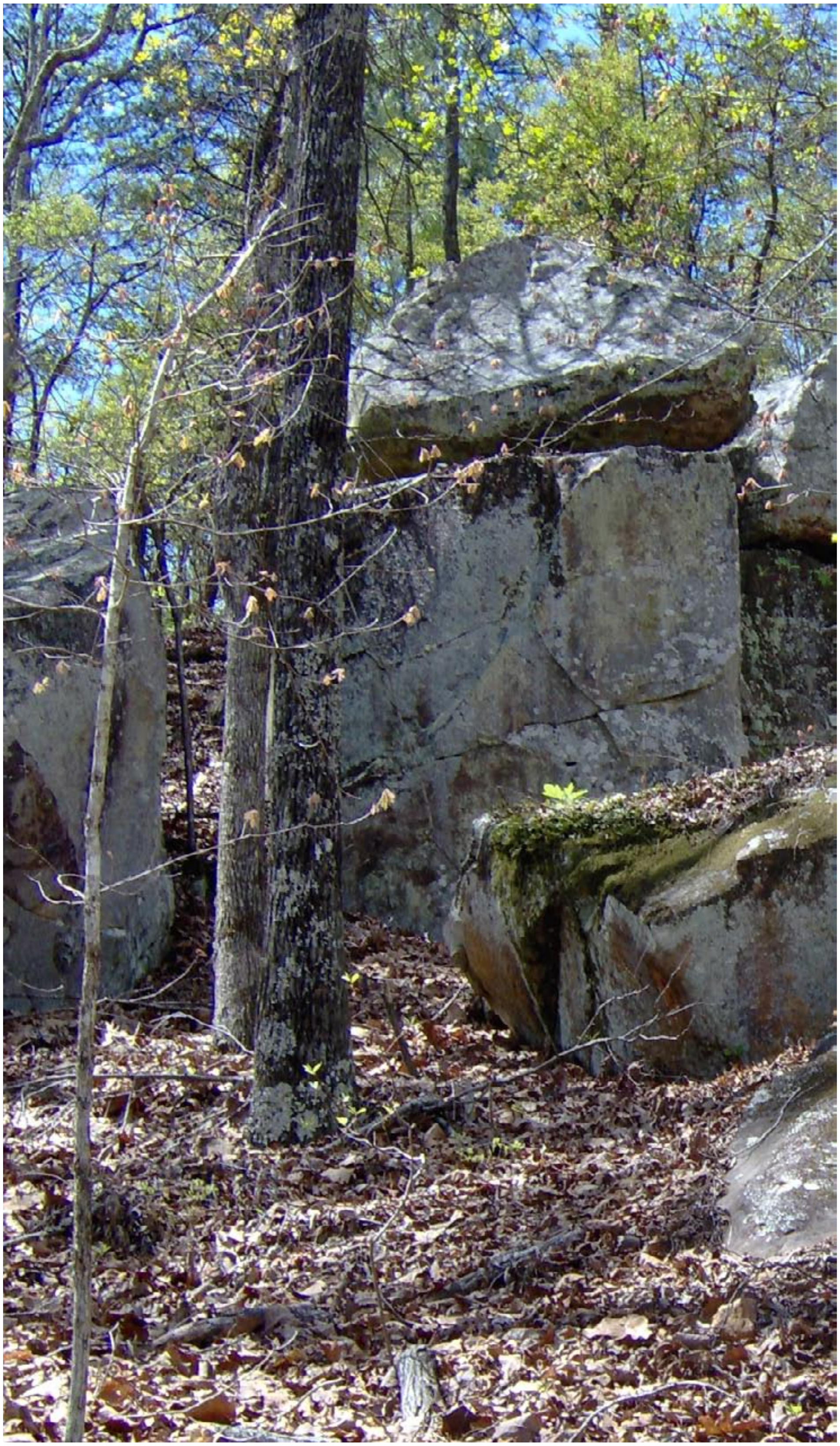


Figure 6.—An area of Gorgas-Rock outcrop complex, 35 to 60 percent slopes. This map unit is suited to forestland. Equipment use is a management concern.

Management measures and considerations:
- This map unit is severely limited for crop production because of the very steep slopes.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Unsuited
Management concerns: Slope and rock content
Management measures and considerations:
- This map unit is severely limited as pasture and hayland because of the slope and rock content.
- A site that has better suited soils should be selected.

Forestland
Suitability: Poorly suited
Productivity class: Moderate for loblolly pine
Management concerns: Erodibility, equipment use, and seedling survival
Management measures and considerations:
- Planting appropriate species as recommended by a forester maximizes productivity and helps to ensure planting success.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control erosion and the siltation of streams.
- Cable logging can help to overcome the equipment limitation and reduce the hazard of erosion caused by road construction, skid trails, and heavy machinery.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water, thereby improving aquatic habitat.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Steepness of slope and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited as a site for urban development because of the slope.
- A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: Gorgas—7s; Rock outcrop—8
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

LdA—Lucedale sandy loam, 0 to 2 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Summits
Shape of areas: Oblong or irregular
Size of areas: 20 to 150 acres

Composition

Lucedale and similar soils: 95 percent
Dissimilar soils: 5 percent

Typical Profile

Surface layer:
0 to 4 inches—dark reddish brown sandy loam

Subsoil:
4 to 75 inches—dark red sandy clay loam
75 to 80 inches—dark red sandy clay loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Scattered areas of the clayey Colwell soils
- Lucedale soils that have a slope of more than 2 percent

Similar soils:
- Scattered areas of Bama soils that do not have dark red colors throughout the subsoil
- Scattered areas of Lucedale soils that have gravelly strata below a depth of 60 inches

Land Use

Dominant uses: Cropland, pasture, and hayland
Other uses: Forestland and homesites

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: No significant limitations affect management of cropland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited

Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 1
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

LdB—Lucedale sandy loam, 2 to 5 percent slopes

Setting

Landform: High stream terraces; ridges
Landform position: Shoulder slopes and side slopes
Shape of areas: Irregular
Size of areas: 10 to 200 acres

Composition

Lucedale and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 4 inches—dark reddish brown sandy loam

Subsoil:
4 to 75 inches—dark red sandy clay loam
75 to 80 inches—dark red sandy clay loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Scattered areas of the clayey Colwell soils
- Lucedale soils that have a slope of less than 2 percent or more than 5 percent

Similar soils:
- Scattered areas of Bama and Smithdale soils that do not have dark red colors throughout the subsoil
- Scattered areas of Lucedale soils that have gravelly strata below a depth of 60 inches
- Scattered areas of Lucedale soils that have a surface layer of loam or clay loam

Land Use

Dominant uses: Cropland, pasture, and hayland
Other uses: Forestland and homesites

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

LnB—Luverne sandy loam, 2 to 5 percent slopes

Setting

Landform: Ridges
Landform position: Summits and shoulder slopes
Shape of areas: Irregular
Size of areas: 20 to 150 acres

Composition

Luverne and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 3 inches—dark grayish brown sandy loam

Subsurface layer:
3 to 9 inches—yellowish brown sandy loam

Subsoil:
9 to 16 inches—red clay
16 to 20 inches—red clay that has brownish mottles
20 to 33 inches—red clay loam that has brownish mottles
33 to 48 inches—red clay loam and sandy clay loam having reddish, brownish, and grayish mottles

Substratum:
48 to 80 inches—red and yellowish red sandy clay loam that has thin strata of reddish, brownish, and grayish sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Luverne soils that have a slope of more than 5 percent
- The moderately well drained Conecuh soils on the lower parts of slopes
- The moderately well drained Maubila soils on small knolls
- The loamy Smithdale soils on shoulder slopes or small knolls

Similar soils:
- Scattered areas of clayey soils that have a substratum of loamy sand or sand

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture, hayland, cropland, and homesites

Cropland

Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland

Suitability: Well suited
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.

- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: High for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Competition from undesirable plants and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Low strength
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

LsD—Luverne-Smithdale complex, 5 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Luverne—backslopes and footslopes; Smithdale—shoulder slopes and upper parts of backslopes
Shape of areas: Irregular
Size of areas: 20 to 300 acres

Composition

Luverne and similar soils: 60 percent
Smithdale and similar soils: 30 percent
Dissimilar soils: 10 percent

Typical Profiles

Luverne
Surface layer:
0 to 3 inches—dark grayish brown sandy loam

Subsurface layer:
3 to 9 inches—yellowish brown sandy loam

Subsoil:
9 to 16 inches—red clay
16 to 20 inches—red clay that has brownish mottles
20 to 33 inches—red clay loam that has brownish mottles
33 to 48 inches—red clay loam and sandy clay loam having reddish, brownish, and grayish mottles

Substratum:
48 to 80 inches—red and yellowish red sandy clay loam that has thin strata of reddish, brownish, and grayish sandy loam

Smithdale
Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 37 inches—red sandy clay loam
37 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained

Permeability: Luverne—moderately slow; Smithdale—moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Luverne—moderate; Smithdale—low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The sandy Boykin and Wadley soils on shoulder slopes and footslopes
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Luverne and Smithdale soils that have a slope of less of than 5 percent or more than 15 percent
- Scattered areas of the moderately well drained, clayey Maubila soils

Similar soils:
- Scattered areas of clayey soils that have a substratum of loamy sand or sand
- Scattered areas of well drained, loamy soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize infiltration of rainfall.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods in areas of the Luverne soil because of the high content of clay in the soil.

- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor

Management concerns: Erodibility and equipment use

Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings

Suitability: Poorly suited

Management concerns: Luverne—slope and shrink-swell potential; Smithdale—slope

Management measures and considerations:

- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling in areas of the Luverne soil.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields

Suitability: Luverne—poorly suited; Smithdale—suited

Management concerns: Luverne—restricted permeability and slope; Smithdale—slope

Management measures and considerations:

- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system in areas of the Luverne soil.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Luverne soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets

Suitability: Suited

Management concerns: Luverne—low strength and slope; Smithdale—slope

Management measures and considerations:

- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material in areas of the Luverne soil.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 6e

Prime farmland status: Not prime farmland

Hydric soil status: Not hydric

LsF—Luverne-Smithdale complex, 15 to 35 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, back slopes, and footslopes
Shape of areas: Irregular
Size of areas: 40 to 600 acres

Composition

Luverne and similar soils: 60 percent
Smithdale and similar soils: 30 percent
Dissimilar soils: 10 percent

Typical Profiles

Luverne
Surface layer:
0 to 3 inches—dark grayish brown sandy loam

Subsurface layer:
3 to 9 inches—yellowish brown sandy loam

Subsoil:
9 to 16 inches—red clay
16 to 20 inches—red clay that has brownish mottles
20 to 33 inches—red clay loam that has brownish mottles
33 to 48 inches—red clay loam and sandy clay loam having reddish, brownish, and grayish mottles

Substratum:
48 to 80 inches—red and yellowish red sandy clay loam that has thin strata of reddish, brownish, and grayish sandy loam

Smithdale
Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 37 inches—red sandy clay loam
37 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Luverne—moderately slow; Smithdale—moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Luverne—moderate; Smithdale—low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The sandy Boykin and Wadley soils on shoulder slopes and footslopes
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Luverne and Smithdale soils that have a slope of less of than 15 percent or more than 35 percent
- Scattered areas of the moderately well drained, clayey Maubila soils

Similar soils:
- Scattered areas of clayey soils that have a substratum of loamy sand or sand
- Scattered areas of well drained, loamy soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: Very high for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control the hazard of erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use

Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Luverne—slope and shrink-swell potential; Smithdale—slope
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling in areas of the Luverne soil.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Luverne—restricted permeability and slope; Smithdale—slope
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system in areas of the Luverne soil.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Luverne soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Luverne—low strength and slope; Smithdale—slope
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material in areas of the Luverne soil.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Flood plains
Landform position: Mantachie—low parts of natural levees and in backswamps; Iuka—convex slopes on high and intermediate parts of natural levees; Kinston—flat or concave slopes in backswamps

Shape of areas: Long and narrow
Size of areas: 100 to 2,000 acres

Composition

The composition of this map unit is variable. Some areas consist mainly of the Mantachie soil, some areas consist mainly of Kinston or Iuka soils, and others contain all three soils in variable proportions. The composition of a representative unit is:

Mantachie and similar soils: 35 percent
Iuka and similar soils: 30 percent
Kinston and similar soils: 25 percent
Dissimilar soils: 10 percent.

Typical Profiles

Mantachie
Surface layer:
0 to 6 inches—very dark grayish brown fine sandy loam
6 to 12 inches—brown fine sandy loam

Subsoil:
12 to 53 inches—light brownish gray sandy clay loam that has brownish mottles
53 to 80 inches—light gray sandy clay loam that has brownish and reddish mottles

Iuka
Surface layer:
0 to 3 inches—brown fine sandy loam

Substratum:
3 to 36 inches—yellowish brown and strong brown sandy loam that has brownish mottles
36 to 46 inches—brown sandy loam
46 to 80 inches—light brownish gray loam that has reddish and yellowish mottles

Kinston
Surface layer:
0 to 10 inches—black loam

Subsoil:
10 to 17 inches—very dark gray sandy clay loam that has brownish mottles
17 to 25 inches—gray sandy clay loam that has brownish and yellowish mottles
25 to 44 inches—light gray sandy clay loam that has brownish mottles

Substratum:
44 to 80 inches—light gray sandy clay loam that has brownish mottles and thin strata of sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Mantachie—somewhat poorly drained; Iuka—moderately well drained; Kinston—poorly drained
Permeability: Moderate
Available water capacity: Mantachie and Kinston—high; Iuka—moderate
Seasonal high water table: Mantachie—apparent, at a depth of 1 to 1$^1/_2$ feet from December through April; Iuka—apparent, at a depth of 1$^1/_2$ to 3 feet from December through April; Kinston—apparent, from the surface to a depth of 1 foot from December through April
Shrink-swell potential: Low
Flooding: Frequent, brief

Content of organic matter in the surface layer: Moderate
Natural fertility: Moderate
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Cahaba and moderately well drained Columbus soils on low knolls and remnants of terraces
- The very poorly drained Fluvaquents in depressions that are subject to long-duration ponding

Similar soils:
- Poorly drained sandy soils in positions similar to those of the Kinston soil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Unsuited
Management concerns: Flooding and wetness
Management measures and considerations:
- This map unit is severely limited for crop production because of the flooding and wetness.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited
Commonly grown crops: Bermudagrass, bahiagrass, tall fescue, and white clover
Management concerns: Flooding and wetness
Management measures and considerations:
- Although most of the flooding occurs during winter and spring, livestock and hay may be damaged during any time of the year.
- Using well maintained ditches to remove excess water improves productivity.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: High for loblolly pine, water oak, and sweetgum
Management concerns: Equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- Restricting the use of standard wheeled and tracked equipment to dry periods helps to prevent rutting and compaction.
- Harvesting timber during the summer or fall reduces the risk of damage from the flooding.
- Bedding the Kinston and Mantachie soils prior to planting helps to establish seedlings and increases the seedling survival rate.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water, thereby improving aquatic habitat.

Wildlife habitat

Potential of the Mantachie soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—fair

Potential of the Iuka soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—poor

Potential of the Kinston soil to support habitat for: Openland wildlife and forestland wildlife—poor; wetland wildlife—fair

Management concerns: Equipment use, flooding, and wetness

Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development

Suitability: Unsuited

Management concerns: Flooding and wetness

Management measures and considerations:

- This map unit is severely limited as a site for urban development because of the flooding and wetness.
- A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: 5w

Prime farmland status: Not prime farmland

Hydric soil status: Mantachie and Iuka—no; Kinston—yes

MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded

Setting

Landform: Ridges

Landform position: Summits, shoulder slopes, and knolls

Shape of areas: Irregular

Size of areas: 5 to 200 acres

Composition

Maubila and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 4 inches—dark yellowish brown flaggy loam (fig. 7)

Subsoil:

4 to 18 inches—yellowish red clay

18 to 27 inches—yellowish red clay that has brownish, grayish, and reddish mottles

27 to 32 inches—yellowish red sandy clay loam that has grayish mottles

32 to 42 inches—yellowish red silty clay that has grayish mottles

Substratum:

42 to 80 inches—mottled grayish, brownish, and reddish clay that has thin strata of sandy clay loam and sandy loam

Figure 7.—Typical surface layer of Maubila flaggy loam, 2 to 8 percent slopes, eroded, which has 15 to 35 percent flat and rounded fragments.

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Available water capacity: High
Seasonal high water table: Perched, at a depth of 2 to $3^1/_2$ feet from January through April
Shrink-swell potential: Moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The sandy Boykin and Wadley soils on shoulder slopes and knolls
- Ironstone outcrops and boulders on knolls and shoulder slopes
- Scattered areas of the well drained Luverne soils
- The loamy Smithdale soils in positions similar to those of the Maubila soil

Similar soils:
- Scattered areas of Maubila soils that have surface and subsurface layers of sandy loam or loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of further erosion, help to control surface runoff, and maximize rainfall infiltration.
- This map unit is difficult to till because of the high content of rock fragments in the surface layer.
- In some areas, large stones on the surface can interfere with the use of tillage equipment. Removing the larger stones and limiting equipment use to the larger open areas minimize wear on the equipment.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Special care should be taken to control further erosion when pastures are renovated or seedbeds are established.
- In some areas, large stones on the surface can interfere with the use of equipment. Removing the larger stones and limiting equipment use to the larger open areas minimize wear on the equipment.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: Moderate for longleaf pine and loblolly pine
Management concerns: Equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- The high content of rock fragments in the surface layer restricts the use of mechanical planting.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling mortality rate, and improves early seedling growth.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of

desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.
- Large stones and boulders may be encountered during excavation.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Low strength
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.

Interpretive Groups

Land capability classification: 4e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes

Setting

Landform: Hillslopes
Landform position: Maubila and Smithdale—shoulder slopes and back slopes; Boykin—nose slopes and footslopes
Shape of areas: Irregular
Size of areas: 50 to 400 acres

Composition

Maubila and similar soils: 35 percent
Smithdale and similar soils: 35 percent
Boykin and similar soils: 20 percent
Dissimilar soils: 10 percent

Typical Profiles

Maubila

Surface layer:

0 to 4 inches—dark yellowish brown flaggy loam

Subsoil:

4 to 18 inches—yellowish red clay
18 to 27 inches—yellowish red clay that has brownish, grayish, and reddish mottles
27 to 32 inches—yellowish red sandy clay loam that has grayish mottles
32 to 42 inches—yellowish red silty clay that has grayish mottles

Substratum:

42 to 80 inches—mottled grayish, brownish, and reddish clay that has thin strata of sandy clay loam and sandy loam

Smithdale

Surface layer:

0 to 6 inches—brown sandy loam

Subsurface layer:

6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:

18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Boykin

Surface layer:

0 to 4 inches—very dark grayish brown loamy sand

Subsurface layer:

4 to 31 inches—brown loamy sand

Subsoil:

31 to 62 inches—yellowish red sandy clay loam
62 to 80 inches—yellowish red sandy clay loam that has reddish and brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Maubila—moderately well drained; Smithdale and Boykin—well drained
Permeability: Maubila—slow; Smithdale—moderate; Boykin—rapid in the surface and subsurface layers and moderate in the subsoil
Available water capacity: Maubila and Smithdale—high; Boykin—low
Seasonal high water table: Maubila—perched, at a depth of 2 to 3 1/2 feet from January through March; Smithdale and Boykin—none within a depth of 6 feet
Shrink-swell potential: Maubila—moderate; Smithdale and Boykin—low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:

- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways

- Ironstone outcrop and boulders on shoulder slopes and crests of narrow ridges
- Scattered areas of the well drained, clayey Luverne soils
- The sandy Wadley soils on footslopes

Similar soils:
- Scattered areas of Maubila soils that have surface and subsurface layers of sandy loam or loam
- Scattered areas of moderately well drained, loamy soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, soybeans, and truck crops
Management concerns: Erodibility, equipment use, and droughtiness
Management measures and considerations:
- Contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Cultivation should be restricted to the less sloping areas.
- This map unit is difficult to till because of the high content of rock fragments in the surface and subsurface layers in the Maubila soil.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility, equipment use, and droughtiness
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Maubila—moderate for loblolly pine and longleaf pine; Smithdale and Boykin—high for loblolly pine and longleaf pine
Management concerns: Equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- The high content of rock fragments in the surface layer restricts the use of mechanical planting in areas of the Maubila soil.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling mortality rate, and improves early seedling growth.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.

- Unsurfaced roads may be impassable during wet periods in areas of the Maubila soil because of the high content of clay in the soil.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential of the Maubila and Smithdale soils to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor

Potential of the Boykin soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor

Management concerns: Erodibility and equipment use

Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings

Suitability: Suited

Management concerns: Maubila—slope and shrink-swell potential; Smithdale and Boykin—slope

Management measures and considerations:

- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling in areas of the Maubila soil.

Septic tank absorption fields

Suitability: Maubila—poorly suited; Smithdale and Boykin—suited

Management concerns: Maubila—restricted permeability and slope; Smithdale and Boykin—slope

Management measures and considerations:

- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system in areas of the Maubila soil.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Maubila soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets

Suitability: Suited

Management concerns: Maubila—low strength and slope; Smithdale and Boykin—slope

Management measures and considerations:

- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material in areas of the Maubila soil.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

• Vegetating cut-and-fill slopes as soon as possible after construction helps to stabilize the soil and reduces the hazard of erosion.

Interpretive Groups

Land capability classification: Maubila and Smithdale—6e; Boykin—6s
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MsF—Maubila-Smithdale complex, 15 to 35 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, back slopes, and footslopes
Shape of areas: Irregular
Size of areas: 50 to 1,000 acres

Composition

Maubila and similar soils: 60 percent
Smithdale and similar soils: 30 percent
Dissimilar soils: 10 percent

Typical Profiles

Maubila
Surface layer:
0 to 4 inches—dark yellowish brown flaggy loam

Subsoil:
4 to 18 inches—yellowish red clay
18 to 27 inches—yellowish red clay that has brownish, grayish, and reddish mottles
27 to 32 inches—yellowish red sandy clay loam that has grayish mottles
32 to 42 inches—yellowish red silty clay that has grayish mottles

Substratum:
42 to 80 inches—mottled grayish, brownish, and reddish clay that has thin strata of sandy clay loam and sandy loam

Smithdale
Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Maubila—moderately well drained; Smithdale—well drained
Permeability: Maubila—slow; Smithdale—moderate
Available water capacity: High

Seasonal high water table: Maubila—perched, at a depth of 2 to $3^1/_2$ feet from January through March; Smithdale—none within a depth of 6 feet
Shrink-swell potential: Maubila—moderate; Smithdale—low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The sandy Boykin and Wadley soils on shoulder slopes and footslopes
- Ironstone outcrops and boulders on shoulder slopes and crests of narrow ridges
- Scattered areas of the well drained, clayey Luverne soils
- Maubila and Smithdale soils that have slopes of less than 15 percent or more than 35 percent

Similar soils:
- Scattered areas of clayey soils that have a substratum of loamy sand or sand
- Scattered areas of Maubila soils that have surface and subsurface layers of sandy loam or loam

Land Use

Dominant uses: Forestland and wildlife habitat (fig. 8)
Other uses: Pasture

Figure 8.—A stand of longleaf pine in an area of Maubila-Smithdale complex, 15 to 35 percent slopes. This area is in Talladega National Forest and is managed for timber production and as habitat for the red-cockaded woodpecker, an endangered species.

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: Maubila—moderate for loblolly pine and longleaf pine; Smithdale—high for longleaf pine and loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Maubila—slope and shrink-swell potential; Smithdale—slope

Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling in areas of the Maubila soil.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Maubila—restricted permeability and slope; Smithdale—slope
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system in areas of the Maubila soil.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Maubila soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Maubila—low strength and slope; Smithdale—slope
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material in areas of the Maubila soil.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MsG—Maubila-Smithdale complex, 35 to 45 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, back slopes, and footslopes
Shape of areas: Irregular
Size of areas: 50 to 400 acres

Composition

Maubila and similar soils: 50 percent
Smithdale and similar soils: 35 percent
Dissimilar soils: 15 percent

Typical Profiles

Maubila
Surface layer:
0 to 4 inches—dark yellowish brown flaggy loam

Subsoil:
4 to 18 inches—yellowish red clay
18 to 27 inches—yellowish red clay that has brownish, grayish, and reddish mottles
27 to 32 inches—yellowish red sandy clay loam that has grayish mottles
32 to 42 inches—yellowish red silty clay that has grayish mottles

Substratum:
42 to 80 inches—mottled grayish, brownish, and reddish clay that has thin strata of sandy clay loam and sandy loam

Smithdale
Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Maubila—moderately well drained; Smithdale—well drained
Permeability: Maubila—slow; Smithdale—moderate
Available water capacity: High
Seasonal high water table: Maubila—perched, at a depth of 2 to 3½ feet from January through March; Smithdale—none within a depth of 6 feet
Shrink-swell potential: Maubila—moderate; Smithdale—low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The sandy Boykin and Wadley soils on shoulder slopes and footslopes
- Ironstone outcrops and boulders on shoulder slopes and crests of narrow ridges
- Scattered areas of the well drained, clayey Luverne soils
- Maubila and Smithdale soils that have slopes of less than 35 percent or more than 45 percent

Similar soils:
- Scattered areas of clayey soils that have a substratum of loamy sand or sand
- Scattered areas of Maubila soils that have surface and subsurface layers of sandy loam or loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the very steep slopes.
- A site that has better suited soils should be selected.

Pasture and hayland

Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited as pasture and hayland because of the very steep slopes.
- A site that has better suited soils should be selected.

Forestland

Suitability: Poorly suited
Productivity class: Maubila—moderate for loblolly pine and longleaf pine; Smithdale—high for loblolly pine and longleaf pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Reseeding disturbed areas with adapted grasses and legumes and establishing a permanent plant cover on roads and landings after the completion of logging help to control erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.

Wildlife habitat

Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development

Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited as a site for urban development because of the very steep slope.
- A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MtA—Minter silty clay loam, ponded

Setting

Landform: Low stream terraces
Landform position: Swales, sloughs, oxbows, and other depressions
Shape of areas: Oblong
Size of areas: 15 to 200 acres

Composition

Minter and similar soils: 95 percent
Dissimilar soils: 5 percent

Typical Profile

Surface layer:
0 to 5 inches—grayish brown silty clay loam
5 to 10 inches—grayish brown silty clay loam that has yellowish brown mottles

Subsoil:
10 to 18 inches—grayish brown clay loam
18 to 72 inches—gray clay that has reddish and brownish mottles
72 to 80 inches—gray sandy clay loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Very slow
Available water capacity: High
Seasonal high water table: Apparent, from 3 feet above the surface to a depth of 1 foot from December through July
Shrink-swell potential: Moderate
Flooding: Frequent, brief
Content of organic matter in the surface layer: Moderate
Natural fertility: Moderate
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The moderately well drained Annemaine and loamy Columbus soils on rises and knolls

Similar soils:
- Scattered areas of Minter soils that have a surface layer of silt loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Cropland and hayland

Cropland
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness

Pasture and hayland
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness

Forestland
Suitability: Poorly suited
Productivity class: Very high for baldcypress and green ash
Management concerns: Equipment use, seedling mortality, and competition from undesirable plants
Management measures and considerations:
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Harvesting timber during summer or fall reduces the risk of damage from flooding.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Flooding and wetness
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Unsuited
Management concerns: Flooding, ponding, and wetness
Management measures and considerations:
- This map unit is unsuited as a site for dwellings because of the flooding, ponding, and wetness.
- A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Unsuited
Management concerns: Flooding, wetness, and restricted permeability
Management measures and considerations:
- This map unit is unsuited to septic tank absorption fields because of the flooding, ponding, and wetness.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Unsuited
Management concerns: Flooding, ponding, wetness, and low strength
Management measures and considerations:
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 7w
Prime farmland status: Not prime farmland
Hydric soil status: Hydric

MvB—Minvale gravelly silt loam, 2 to 6 percent slopes

Setting

Landform: Ridges and hillslopes
Landform position: Summits
Shape of areas: Irregular
Size of areas: 15 to 100 acres

Composition

Minvale and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 7 inches—brown gravelly silt loam

Subsurface layer:
7 to 13 inches—light yellowish brown gravelly silt loam

Subsoil:
13 to 17 inches—light yellowish brown gravelly silt loam that has strong brown mottles
17 to 37 inches—strong brown gravelly silty clay loam
37 to 80 inches—red gravelly silty clay loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: Moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The somewhat excessively drained Bodine soils, which are very gravelly and are in the more convex positions
- Fullerton soils, which are clayey and have a red subsoil
- Minvale soils that have a slope of less than 2 percent or more than 6 percent

Similar soils:
- Scattered areas of Minvale soils that have a surface layer of gravelly loam

Land Use

Dominant uses: Cropland, pasture, and hayland
Other uses: Forestland and homesites

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop

residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: No significant limitations affect management of pasture and hayland.
Management measures and considerations:
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: High for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

MvD—Minvale gravelly silt loam, 6 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes

Shape of areas: Irregular
Size of areas: 15 to 250 acres

Composition

Minvale and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 7 inches—brown gravelly silt loam

Subsurface layer:
7 to 13 inches—light yellowish brown gravelly silt loam

Subsoil:
13 to 17 inches—light yellowish brown gravelly silt loam that has strong brown mottles
17 to 37 inches—strong brown gravelly silty clay loam
37 to 80 inches—red gravelly silty clay loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The somewhat excessively drained Bodine soils, which are very gravelly and are in the more convex positions
- Fullerton soils, which are clayey and have a red subsoil
- Minvale soils that have a slope of less than 2 percent or more than 6 percent

Similar soils:
- Scattered areas of Minvale soils that have a surface layer of gravelly loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Terraces and diversions, contour farming, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited to pasture; suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: High for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Installing distribution lines on the contour improves the performance of the system.

Local roads and streets
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 4e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MW—Miscellaneous water

This map unit consists of areas of water that are generally unsuited to consumptive use. Areas include sewage lagoons, fish hatcheries, livestock waste lagoons, livestock waste lagoons, sediment ponds, and industrial-waste-water holding ponds.

MwF—Montevallo-Townley complex, 15 to 35 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, back slopes, and footslopes
Shape of areas: Irregular
Size of areas: 40 to 600 acres

Composition

Montevallo and similar soils: 50 percent
Townley similar soils: 30 percent
Dissimilar soils: 20 percent

Typical Profiles

Montevallo
Surface layer:
0 to 2 inches—very dark grayish brown very channery silt loam

Subsoil:
2 to 10 inches—dark yellowish brown very channery silt loam

Substratum:
10 to 16 inches—extremely channery yellowish brown silt loam

Underlying material:
16 to 80 inches—fractured shale

Townley
Surface layer:
0 to 5 inches—dark grayish brown silt loam

Subsurface layer:
5 to 12 inches—yellowish brown silt loam

Subsoil:
12 to 25 inches—strong brown silty clay
25 to 35 inches—strong brown silty clay loam

Underlying material:
35 to 80 inches—soft shale

Soil Properties and Qualities

Depth class: Montevallo—shallow; Townley—moderately deep
Drainage class: Well drained
Permeability: Montevallo—moderate; Townley—slow
Available water capacity: Montevallo—moderate; Townley—high
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Montevallo—low; Townley—moderate
Flooding: None
Content of organic matter in the surface layer: Low

Natural fertility: Low
Depth to bedrock: Montevallo—10 to 20 inches; Townley—20 to 40 inches

Minor Components

Dissimilar soils:
- The loamy Nauvoo soils, which are on shoulder slopes and are deep to bedrock
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Montevallo and Townley soils that have slopes of less than 15 percent or more than 35 percent

Similar soils:
- Scattered areas of soils that have a clayey surface layer
- Scattered areas of soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland

Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland

Suitability: Poorly suited to pasture; unsuited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control the hazard of erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use

Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Montevallo—slope and depth to rock; Townley—slope and shrink-swell potential
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Montevallo—depth to rock and slope; Townley—slope, depth to rock, and restricted permeability
Management measures and considerations:
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Slope and depth to rock
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded

Setting

Landform: Low stream terraces
Landform position: Flat and slightly convex slopes
Shape of areas: Oblong
Size of areas: 15 to 300 acres

Composition

Myatt and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 4 inches—grayish brown fine sandy loam

Subsoil:
4 to 28 inches—light gray sandy clay loam
28 to 36 inches—light brownish gray clay loam that has yellowish and brownish mottles
36 to 53 inches—light gray loam that has brownish mottles

Substratum:
53 to 80 inches—gray loam that has brownish mottles

Soil Properties and Qualities

Depth class: Deep
Drainage class: Poorly drained
Permeability: Moderately slow
Available water capacity: High
Seasonal high water table: Apparent, at the surface to a depth of 1 foot from January through April
Shrink-swell potential: Low
Flooding: Rare
Content of organic matter in the surface layer: Moderate
Natural fertility: Moderate
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The moderately well drained Annemaine and Columbus soils in the slightly higher, more convex positions
- The somewhat poorly drained Mantachie and poorly drained Bibb soils in narrow drainageways and swales

Similar soils:
- Scattered areas of Minter soils that have a surface layer of silt loam

Land Use

Dominant uses: Forestland and pasture
Other uses: Cropland and hayland

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, soybeans, grain sorghum, and cotton
Management concerns: Flooding and wetness

Pasture and hayland
Suitability: Poorly suited
Commonly grown crops: Bahiagrass and coastal bermudagrass
Management concerns: Flooding and wetness

Forestland
Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Equipment use, seedling mortality, and competition from undesirable plants
Management measures and considerations:
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.

- Harvesting timber during summer or fall reduces the risk of damage from flooding.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Flooding and wetness
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding and wetness
Management measures and considerations:
- This map unit is unsuited as a site for dwellings because of the flooding and wetness.
- A site that has better suited soils should be selected.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Flooding, wetness, and restricted permeability
Management measures and considerations:
- This map unit is unsuited to septic tank absorption fields because of the flooding and wetness.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding, wetness, and low strength
Management measures and considerations:
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness and the low strength of the natural soil material.
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 3w
Prime farmland status: Not prime farmland
Hydric soil status: Hydric

NaC—Nauvoo sandy loam, 2 to 8 percent slopes

Setting

Landform: Narrow ridges
Landform position: Summits, shoulder slopes, and knolls

Shape of areas: Irregular
Size of areas: 15 to 150 acres

Composition

Nauvoo and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown sandy loam

Subsurface layer:
6 to 10 inches—brownish yellow sandy loam
10 to 13 inches—reddish yellow loam

Subsoil:
13 to 40 inches—red clay loam

Substratum:
40 to 55 inches—mottled reddish and brownish sandy clay loam

Underlying material:
55 to 80 inches—highly weathered sandstone

Soil Properties and Qualities

Depth class: Deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: 40 to 60 inches

Minor Components

Dissimilar soils:
- Scattered areas of Nauvoo soils that do not have bedrock within a depth of 60 inches
- The moderately deep Sipsey soils on shoulder and saddles
- Nauvoo soils that have a slope of more than 8 percent

Similar soils:
- Scattered areas of reddish or brownish soils that have less clay in the subsoil than the Nauvoo soil
- Nauvoo soils that have a surface layer of loamy sand

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Cropland, pasture, and hayland

Cropland
Suitability: Suited
Commonly grown crops: Corn and truck crops
Management concerns: Erodibility

Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- The complexity of the slope limits the use of terraces in narrow areas of the map unit.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded

Setting

Landform: Flood plains
Landform position: Natural levees
Shape of areas: Long and narrow
Size of areas: 10 to 200 acres

Composition

Ochlockonee and similar soils: 60 percent
Riverview and similar soils: 30 percent
Dissimilar soils: 10 percent

Typical Profile

Ochlockonee
Surface layer:
0 to 3 inches—brown loamy sand
3 to 7 inches—dark yellowish brown loamy sand

Substratum:
7 to 15 inches—stratified dark yellowish brown sandy loam
15 to 44 inches—yellowish brown loamy sand and sandy loam
44 to 65 inches—olive yellow loamy sand that has brown mottles
65 to 80 inches—pale yellow loamy sand

Riverview
Surface layer:
0 to 3 inches—brown sandy loam
3 to 7 inches—brown sandy loam

Subsoil:
7 to 25 inches—strong brown sandy clay loam
25 to 30 inches—strong brown sandy loam

Substratum:
30 to 51 inches—brownish yellow sandy loam
51 to 80 inches—brownish yellow fine sandy loam

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: Ochlockonee—moderate; Riverview—high
Seasonal high water table: Apparent, at a depth of 3 to 5 feet from December through April
Shrink-swell potential: Low
Flooding: Frequent, brief
Content of organic matter in the surface layer: Low
Natural fertility: Low

Minor Components

Dissimilar soils:
- The clayey Annemaine soils on knolls or remnant of terraces
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways

- Cahaba soils, which have more strongly developed subsoil horizons than those of the Ochlockonee and Riverview soils; on knolls and remnants of terraces
- The poorly drained Minter soils in sloughs and swales

Similar soils:
- Scattered areas of Ochlockonee and Riverview soils that have a surface layer of loamy sand

Land Use

Dominant uses: Forestland
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Commonly grown crops: Cotton and corn
Management concerns: Flooding and soil fertility
Management measures and considerations:
- Harvesting row crops as soon as possible reduces the risk of damage from the flooding.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited
Commonly grown crops: Bahiagrass and coastal bermudagrass
Management concerns: Flooding and soil fertility
Management measures and considerations:
- Harvesting hay crops as soon as possible reduces the risk of damage from the flooding.
- Using rotational grazing and implementing a well planned schedule of clipping and harvesting help to maintain the pasture and increase productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity during the establishment, maintainence, or renovation of hayland and pasture.

Forestland
Suitability: Well suited
Productivity class: High for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Restricting logging to periods when the soil is not saturated helps to prevent rutting of the surface layer and damage to tree roots caused by compaction.
- Site preparation practices, such as prescribed burning and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—poor
Management concerns: Flooding
Management measures and considerations:
- Openland wildlife habitat can be improved by establishing small food plots and leaving a buffer of undisturbed vegetation around the open areas.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small

tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Flooding and wetness
Management measures and considerations:
- Building on the highest part of the landscape reduces the risk of damage from the flooding.
- Constructing dwellings on raised, well-compacted fill material reduces the risk of damage from wetness.

Septic tank absorption fields
Suitability: Unsuited
Management concerns: Flooding and wetness
Management measures and considerations:
- This map unit is severely limited as a site for septic tank absorption fields because of the flooding and wetness.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Flooding
Management measures and considerations:
- Well-compacted fill material can be used as a road base to elevate roads above the flooding.

Interpretive Groups

Land capability classification: 4w
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

PBF—Palmerdale and Brillant soils, 6 to 45 percent slopes

Setting

Landform: Ridges and hillslopes
Landform position: Summits, shoulders, and backslopes
Shape of areas: Long and irregular
Size of areas: 10 to 4,000 acres

Composition

Palmerdale and similar soils: 50 percent
Brilliant and similar soils: 40 percent
Dissimilar soils: 10 percent

Typical Profile

Palmerdale
Surface layer:
0 to 4 inches—brown extremely channery silt loam

Substratum:
4 to 80 inches—brown extremely channery silt loam

Brilliant
Surface layer:
0 to 4 inches—brown very channery silt loam

Substratum:
4 to 42 inches—brown extremely channery silt loam
42 to 80 inches—light olive brown and light yellowish brown extremely channery silty clay loam

Soil Properties and Qualities

Depth class: Deep
Drainage class: Somewhat excessive drained
Permeability: Moderately rapid
Available water capacity: Low
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: High to low

Minor Components

Dissimilar soils:
- Townley and Sunlight soils, which are adjacent to mined areas

Land Use

Dominant uses: Forestland or idle (fig. 9)
Other uses: Pasture and hayland

Cropland
Suitability: Unsuited
Management concerns: Slope and soil fertility

Pasture and hayland
Suitability: Poorly suited
Commonly grown crops: Bahiagrass and coastal bermudagrass
Management concerns:
Management measures and considerations:
- Using rotational grazing and implementing a well planned schedule of clipping and harvesting help to maintain the pasture and increase productivity.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity during the establishment, maintainence, or renovation of hayland and pasture.

Forestland
Suitability: Suited
Productivity class: Moderately high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Restricting logging to periods when the soil is not saturated helps to prevent rutting of the surface layer and damage to tree roots caused by compaction.
- Site preparation practices, such as prescribed burning and the application of herbicides, helps to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—poor; forestland wildlife—fair; wetland wildlife—poor
Management concerns: Slope

Figure 9.—An area of Palmerdale and Brillant soils, 6 to 45 percent slopes. Exposed mine spoil is common in areas of these somewhat excessively well drained soils.

Management measures and considerations:
- Openland wildlife habitat can be improved by establishing small food plots and leaving a buffer of undisturbed vegetation around the open areas.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Building on the highest part of the landscape reduces the risk of damage from the flooding.
- Constructing dwellings on raised, well-compacted fill material reduces the risk of damage from wetness.

Septic tank absorption fields
Suitability: Unsuited
Management concerns: Slope

Local roads and streets
Suitability: Poorly suited
Management concerns: Slope

Interpretive Groups

Land capability classification: 7s
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

Pt—Pits-Udorthents complex

Setting

Landform: Ridgetops, hillslopes, and stream terraces
Landform position: Summits, shoulder slopes, backslopes, and interfluves
Shape of areas: Rectangular or horseshoe
Size of areas: 5 to 20 acres

Composition

Pits: 70 percent
Udorthents and similar soils: 25 percent
Dissimilar soils: 5 percent

This map unit consist of open excavations created by mining operations and the associated piles of mixed soil and nonsoil material.

Pits
Pits consist of open excavations from which the original soil and underlying material have been removed for use at another location. The remaining material consists of strata of sand, gravel, and mixed earthy materials.

Udothents
Udorthents consist of piles of soil and nonsoil material that were mixed during mining operations.

Soil Properties and Qualities

Depth class: Variable
Drainage class: Variable
Permeability: Variable
Available water capacity: Variable
Seasonal high water table: Variable
Shrink-swell potential: Variable
Flooding: Variable
Natural fertility: Low
Content of organic matter in the surface layer: Very low
Depth to bedrock: More than 80 inches
Other distinctive properties: Discontinuous layers, streaks, or pockets of variable texture

Minor Components

Dissimilar components:
- Cahaba and Columbus soils near the edges of mapped areas on low stream terraces
- Bama, Lucedale, Smithdale, and Wadley soils near the edges of mapped areas on high stream terraces and uplands
- Small, intermittently ponded depressions

Land Use

Dominant uses: Source of sand, gravel, or fill material
Other uses: Unsuited to most other uses

Extensive reclamation efforts would be required to make areas of this map unit suitable for use as cropland, pasture, hayland, forestland, or homesites or for wildlife habitat. Onsite investigation and testing are needed to determine the suitability of areas of this unit for any use.

Interpretive Groups

Land capability classification: 8
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

Ql—Quarry, limestone

Setting

Landform: Ridges
Landform position: Summits, shoulder slopes, and side slopes
Shape of areas: Rectangular
Size of areas: 5 to 50 acres

Composition

Pits: 95 percent
Dissimilar soils: 5 percent

This map unit is a miscellaneous area consisting of open excavations from which the original soil and underlying material have been removed. Individual areas are generally rectangular in shape and range from 5 to 50 acres (fig. 10).

Figure 10.—An area of Quarry, limestone. Limestone is mined extensively in the northeastern part of the county.

Included in mapping are areas of abandoned quarries. These areas consist of quarries that have vertical walls and spoil banks that are 20 to 250 feet high. The surface is limestone bedrock. The lower parts of some quarries are ponded for periods ranging from a few days to several months.

Soil Properties and Qualities

Depth class: Variable
Drainage class: Variable
Permeability: Variable
Available water capacity: Variable
Seasonal high water table: Variable
Shrink-swell potential: Variable
Flooding: Variable
Content of organic matter in the surface layer: Variable
Natural fertility: Low
Depth to bedrock: Variable

Minor Components

Dissimilar soils:
- Bodine, Fullerton, Minvale, and Talbott soils near the edges of mapped areas
- Small, intermittently ponded depressions

Land Use

Dominant uses: Source of crushed stone
Other uses: Unsuited to most other uses

This map unit is unsuited for most uses. Most areas do not support vegetation. Extensive reclamation efforts would be required to make areas suitable for use as cropland, pasture, hayland, or forestland or for urban uses. Onsite investigation and testing are needed to determine the suitability of this unit for any use.

Interpretive Groups

Land capability classification: 8
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes
Shape of areas: Irregular
Size of areas: 50 to 400 acres

Composition

Rock outcrop: 45 percent
Barfield and similar soils: 35
Dissimilar soils: 20 percent

Typical Profile

Barfield
Surface layer:
0 to 6 inches—dark brown gravelly silt loam

Subsoil:
6 to 13 inches—dark yellowish brown clay that has brownish mottles

Underlying material:
13 to 80 inches—hard limestone

Soil Properties and Qualities

Barfield
Depth class: Shallow
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: Moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: High
Flooding: None
Content of organic matter in the surface layer: Moderate
Natural fertility: Low
Depth to bedrock: 10 to 20 inches

Minor Components

Dissimilar soils:
- Scattered areas of the well drained Talbott soils that are in positions similar to those of the Barfield soil but do not have very steep slopes
- The poorly drained Bibb and moderately well drained Iuka soils on narrow flood plains
- Barfield soils that have a slope of less than 15 percent

Similar soils:
- Scattered areas of soils that have less clay in the substratum than the Barfield soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the steep and very steep slopes.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited as pasture and hayland because of the slope.
- A site that has better suited soils should be selected.

Forestland
Suitability: Poorly suited
Productivity class: Moderate for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Planting appropriate species as recommended by a forester maximizes productivity and helps to ensure planting success.

- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control erosion and the siltation of streams.
- Cable logging can help to overcome the equipment limitation and reduce the hazard of erosion caused by road construction, skid trails, and heavy machinery.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water, thereby improving aquatic habitat.

Wildlife habitat

Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Steepness of slope and equipment use
Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Urban development

Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:

- This map unit is severely limited as a site for urban development because of the slope.
- A site that has better suited soils should be selected.

Interpretive Groups

Land capability classification: Rock outcrop—8; Barfield—7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Backslopes and footslopes
Shape of areas: Irregular
Size of areas: 10 to 150 acres

Composition

Saffell and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 5 inches—dark yellowish brown gravelly sandy loam

Subsurface layer:
5 to 10 inches—yellowish brown gravelly sandy loam

Subsoil:
10 to 30 inches—yellowish red very gravelly sandy clay loam
30 to 42 inches—yellowish red very gravelly sandy loam

Substratum:
42 to 80 inches—yellowish red very gravelly sandy loam that has strong brown mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: Low
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The sandy Boykin and Wadley soils on foot slopes
- The loamy Smithdale soils on narrow ridges and the upper parts of slopes
- The clayey Luverne and Maubila soils on the lower parts of slopes
- The poorly drained Bibb and moderately well drained Iuka soils on narrow flood plains
- Saffell soils that have a slope of less than 5 percent or more than 15 percent

Similar soils:
- Scattered areas of gravelly soils that have less than 35 percent gravel in the upper part of the subsoil
- Scattered areas of a skeletal soil that has a lower content of clay in the subsoil than the Saffell soil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture, hayland, and homesites

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility, equipment use, and fertility
Management measures and considerations:
- Contour farming, conservation tillage, crop residue management, stripcropping, and sod-based rotations reduce the hazard of erosion, control surface runoff, and maximize infiltration of rainfall.
- This map unit is difficult to manage for crop production because the slope limits the use of equipment.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Suited
Commonly grown crops: Bermudagrass and bahiagrass

Management concerns: Erodibility and fertility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- Fencing livestock away from creeks and streams minimizes erosion of streambanks and sedimentation of creeks and streams.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: High for loblolly pine and longleaf pine
Management concerns: Competition from undesirable plants

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—fair; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Steepness of slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope or can be built in the less sloping areas.

Septic tank absorption fields
Suitability: Suited
Management concerns: Steepness of slope
Management measures and considerations:
- Installing the distribution lines on the contour improves the performance of the system.

Local roads and streets
Suitability: Suited
Management concerns: Steepness of slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

ShA—Savannah silt loam, 0 to 2 percent slopes

Setting

Landform: High stream terraces
Landform position: Summits
Shape of areas: Irregular
Size of areas: 10 to 150 acres

Composition

Savannah and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 7 inches—brown silt loam

Subsoil:
7 to 20 inches—dark yellowish brown loam
20 to 27 inches—yellowish brown loam that has brownish mottles
27 to 43 inches—yellowish brown loam fragipan that has grayish and reddish mottles
43 to 51 inches—yellowish brown loam fragipan that has reddish, brownish, and grayish mottles
51 to 70 inches—strong brown clay loam that has reddish, brownish, and grayish mottles
70 to 80 inches—strong brown clay loam that has reddish, yellowish, and grayish mottles

Soil Properties and Qualities

Depth class: Moderately deep to a root restricting fragipan
Drainage class: Moderately well drained
Permeability: Upper part—moderate; fragipan—moderately slow
Available water capacity: Moderate
Seasonal high water table: Perched, at a depth of $1^1/_2$ to 3 feet from January through March
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Bama soils, which do not have a fragipan, on the slightly higher knolls
- Savannah soils that have a slope of more than 2 percent

Similar soils:
- Scattered areas of Savannah soils that have a surface layer of fine sandy loam or loam

Land Use

Dominant uses: Pasture and hayland
Other uses: Cropland, forestland, and homesites

Cropland
Suitability: Well suited

Commonly grown crops: Corn, cotton, soybeans, and grain sorghum
Management concerns: Wetness and rooting depth
Management measures and considerations:
- Installing and maintaining an artificial drainage system reduces the wetness and improves productivity.
- Chisel plowing and subsoiling help to break through hardpans, increasing root penetration and rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bahiagrass and bermudagrass
Management concerns: Wetness and rooting depth
Management measures and considerations:
- Chisel plowing and subsoiling when seedbeds are prepared help to break through hardpans, increasing root penetration and rainfall infiltration.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants
Management measures and considerations:
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Wetness
Management measures and considerations:
- Installing a subsurface drainage system helps to lower the seasonal high water table.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Wetness and restricted permeability

Management measures and considerations:
- Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Low strength and wetness
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness.

Interpretive Groups

Land capability classification: 2w
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

ShB—Savannah silt loam, 2 to 5 percent slopes

Setting

Landform: High stream terraces
Landform position: Shoulder slopes and backslopes
Shape of areas: Irregular
Size of areas: 10 to 150 acres

Composition

Savannah and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 7 inches—brown silt loam

Subsoil:
7 to 20 inches—dark yellowish brown loam
20 to 27 inches—yellowish brown loam that has brownish mottles
27 to 43 inches—yellowish brown loam fragipan that has grayish and reddish mottles
43 to 51 inches—yellowish brown loam fragipan that has reddish, brownish, and grayish mottles
51 to 70 inches—strong brown clay loam that has reddish, brownish, and grayish mottles
70 to 80 inches—strong brown clay loam that has reddish, yellowish, and grayish mottles

Soil Properties and Qualities

Depth class: Moderately deep to a root restricting fragipan
Drainage class: Moderately well drained

Permeability: Upper part—moderate; fragipan—moderately slow (fig. 11)
Available water capacity: Moderate
Seasonal high water table: Perched, at a depth of 1 1/2 to 3 feet from January through March
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The well drained Bama and Smithdale soils, which do not have a fragipan, on shoulder slopes
- Savannah soils that have a slope of less than 2 percent or more than 5 percent
- The gravelly Saffell soils on shoulder slopes

Similar soils:
- Scattered areas of Savannah soils that have a surface layer of fine sandy loam or loam

Land Use

Dominant uses: Forestland, pasture, and hayland
Other uses: Cropland and homesites

Figure 11.—A cut showing prisms in an area of Savannah silt loam, 2 to 5 percent slopes. These horizons restrict the movement of air and water through the lower parts of the soil.

Cropland
Suitability: Well suited
Commonly grown crops: Corn, cotton, soybeans, and grain sorghum
Management concerns: Erodibility and root penetration
Management measures and considerations:
- Terraces and diversions, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Chisel plowing and subsoiling help to break through hardpans, increasing root penetration and rainfall infiltration.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bahiagrass and bermudagrass
Management concerns: Wetness and root penetration
Management measures and considerations:
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Competition from undesirable plants
Management measures and considerations:
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: No significant limitations affect management of wildlife habitat.
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Wetness
Management measures and considerations:
- Installing a subsurface drainage system helps to lower the seasonal high water table.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Wetness and restricted permeability

Management measures and considerations:
- Using suitable fill material to raise the filter field a sufficient distance above the seasonal high water table and increasing the size of the field improve system performance.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Low strength and wetness
Management measures and considerations:
- Incorporating sand and gravel into the roadbed, compacting the roadbed, and designing roads to conform to the natural slope improve soil performance.
- Constructing roads on raised, well-compacted fill material helps to overcome the wetness.

Interpretive Groups

Land capability classification: 2e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

SmC—Smithdale sandy loam, 2 to 8 percent slopes

Setting

Landform: Ridges
Landform position: Summits, shoulder slopes, and knolls
Shape of areas: Irregular
Size of areas: 15 to 150 acres

Composition

Smithdale and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low

Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- Scattered areas of Bama soils, which do not have a significant decrease in clay content within a depth of 60 inches
- The sandy Boykin soils on shoulder slopes
- The clayey Luverne and Maubila soils in saddles
- Smithdale soils that have a slope of more than 8 percent

Similar soils:
- Scattered areas of reddish or brownish soils that have less clay in the subsoil than the Smithdale soil
- Smithdale soils that have a surface layer of loamy sand

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Cropland, pasture, hayland, and homesites

Cropland
Suitability: Suited
Commonly grown crops: Corn and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, stripcropping, contour tillage, no-till planting, and crop residue management reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- The complexity of the slope limits the use of terraces in narrow areas of the map unit.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.

- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Well suited
Management concerns: No significant limitations affect dwellings.

Septic tank absorption fields
Suitability: Well suited
Management concerns: No significant limitations affect septic tank absorption fields.

Local roads and streets
Suitability: Well suited
Management concerns: No significant limitations affect local roads and streets.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

SmD—Smithdale sandy loam, 5 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, backslopes, footslopes
Shape of areas: Irregular
Size of areas: 15 to 250 acres

Composition

Smithdale and similar soils: 85 percent
Dissimilar soils: 15 percent

Typical Profile

Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate

Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The sandy Boykin and Wadley soils on narrow ridges and on shoulder slopes
- The clayey Luverne and Maubila soils on the lower parts of slopes
- Smithdale soils that have a slope of less than 5 percent or more than 15 percent

Similar soils:
- Scattered areas of reddish or brownish soils that have less clay in the subsoil than the Smithdale soil
- Scattered areas of a Smithdale soil that has a surface layer of loamy fine sand

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture, hayland, and homesites

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, cotton, soybeans, and truck crops
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Terraces and diversions, contour farming, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited to pasture; suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: High for loblolly pine
Management concerns: No significant limitations affect management of forestland.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting or encouraging the growth of oak trees and suitable understory plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Installing distribution lines on the contour improves the performance of the system.

Local roads and streets
Suitability: Suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 4e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Shoulder slopes and side slopes
Shape of areas: Irregular
Size of areas: 20 to 300 acres

Composition

Sipsey and similar soils: 45 percent
Nauvoo and similar soils: 30 percent
Townley and similar soils: 15 percent
Dissimilar soils: 10 percent

Typical Profiles

Sipsey
Surface layer:
0 to 4 inches—dark yellowish brown sandy loam

Subsurface layer:
4 to 13 inches—yellowish brown sandy loam

Subsoil:
13 to 19 inches—yellowish red sandy clay loam
19 to 33 inches—yellowish red sandy clay loam

Underlying material:
33 to 80 inches—highly weathered sandstone

Nauvoo
Surface layer:
0 to 6 inches—dark yellowish brown sandy loam

Subsurface layer:
6 to 10 inches—brownish yellow sandy loam
10 to 13 inches—reddish yellow loam

Subsoil:
13 to 40 inches—red clay loam

Substratum:
40 to 55 inches—mottled reddish and brownish sandy clay loam

Underlying material:
55 to 80 inches—highly weathered sandstone

Townley
Surface layer:
0 to 5 inches—dark grayish brown silt loam

Subsurface layer:
5 to 12 inches—yellowish brown silt loam

Subsoil:
12 to 25 inches—strong brown silty clay
25 to 35 inches—strong brown silty clay loam

Underlying material:
35 to 80 inches—soft shale

Soil Properties and Qualities

Depth class: Sipsey and Townley—moderately deep; Nauvoo—deep
Drainage class: Well drained
Permeability: Sipsey and Nauvoo—moderate; Townley—moderately slow
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Sipsey and Nauvoo—low; Townley—high
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: Sipsey and Townley—20 to 40 inches; Nauvoo—40 to 60 inches

Minor Components

Dissimilar soils:
• The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways

- Sipsey, Nauvoo, and Townley soils that have slopes of less of than 6 percent or more than 15 percent
- Scattered areas of the shallow Sunlight soils

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland

Suitability: Poorly suited
Management concerns: Erodibility
Management measures and considerations:

- Terraces and diversions, contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize infiltration of rainfall.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland

Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:

- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:

- Unsurfaced roads may be impassable during wet periods in areas of the Luverne soil because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small

tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Sipsey—slope and depth to rock; Nauvoo—slope; Townley—slope, depth to bedrock, and shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling in areas of the Townley soil.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Sipsey and Townley—poorly suited; Nauvoo—suited
Management concerns: Sipsey—depth to rock and slope; Nauvoo—slope; Townley—restricted permeability and depth to bedrock
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system in areas of the Townley soil.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls in areas of the Townley soil.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Townley—low strength and slope; Sipsey and Nauvoo—slope
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material in areas of the Townley soil.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes

Setting

Landform: Hillslopes
Landform position: Side slopes, back slopes, and footslopes
Shape of areas: Irregular
Size of areas: 40 to 600 acres

Composition

Sipsey and similar soils: 40 percent
Nauvoo and similar soils: 30 percent

Sunlight and similar soils: 20 percent
Dissimilar soils: 10 percent

Typical Profiles

Sipsey
Surface layer:
0 to 4 inches—dark yellowish brown sandy loam

Subsurface layer:
4 to 13 inches—yellowish brown sandy loam

Subsoil:
13 to 19 inches—yellowish red sandy clay loam
19 to 33 inches—yellowish red sandy clay loam

Underlying material:
33 to 80 inches—highly weathered sandstone

Nauvoo
Surface layer:
0 to 6 inches—dark yellowish brown sandy loam

Subsurface layer:
6 to 10 inches—brownish yellow sandy loam
10 to 13 inches—reddish yellow loam

Subsoil:
13 to 40 inches—red clay loam

Substratum:
40 to 55 inches—mottled reddish and brownish sandy clay loam

Underlying material:
55 to 80 inches—highly weathered sandstone

Sunlight
Surface layer:
0 to 3 inches—very dark grayish brown channery sandy loam

Subsurface layer:
3 to 6 inches—brown channery sandy loam

Subsoil:
6 to 12 inches—reddish yellow extremely channery loam

Underlying material:
12 to 80 inches—fractured, interbedded sandstone and shale

Soil Properties and Qualities

Depth class: Sipsey—moderately deep; Nauvoo—deep; Sunlight—shallow
Drainage class: Well drained
Permeability: Moderate
Available water capacity: Moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: Sipsey—20 to 40 inches; Nauvoo—40 to 60 inches; Sunlight—10 to 20 inches

Minor Components

Dissimilar soils:
- The Townley soils on footslopes have a clayey subsoil
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Sipsey, Nauvoo, and Sunlight soils that have slopes of less of than 15 percent or more than 35 percent

Land Use

Dominant uses: Forestland and wildlife habitat (fig. 12)
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland
Commonly grown crops: Bermudagrass and bahiagrass

Figure 12.—A stand of shortleaf pine in an area of Sipsey-Nauvoo–Sunlight complex, 15 to 35 percent slopes. This map unit is suited to timber production. The moderately steep and steep slopes are a limitation.

Management concerns: Erodibility and equipment use
Management measures and considerations:
- The slope may limit equipment use in the steeper areas.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Erodibility, equipment use, and competition from undesirable plants
Management measures and considerations:
- Installing broad-based dips, water bars, and culverts helps to stabilize logging roads, skid trails, and landings.
- Establishing a permanent plant cover on roads and landings after the completion of logging helps to control the hazard of erosion and the siltation of streams.
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Sipsey and Sunlight—slope and depth to rock; Nauvoo—slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Sipsey and Sunlight—depth to rock and slope; Nauvoo—slope
Management measures and considerations:
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Slope and depth to rock
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery

Setting

Landform: Hillslopes
Landform position: Shoulder, backslopes, and foot slopes
Shape of areas: Irregular
Size of areas: 20 to 200 acres

Composition

Talbott and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profiles

Surface layer:
0 to 6 inches—brown silt loam

Subsurface layer:
6 to 12 inches—yellowish brown silty clay loam

Subsoil:
12 to 25 inches—reddish brown silty clay
25 to 30 inches—strong brown clay

Underlying material:
30 to 80 inches—limestone

Soil Properties and Qualities

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately slow
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Moderate
Depth to bedrock: 20 to 40 inches

Minor Components

Dissimilar soils:
- The shallow Barfield soils on the steeper slopes
- Talbott soils that have a slope of less of than 6 percent or more than 15 percent
- Bodine and Minvale soils, which have very deep subsoils

Similar soils:
- Scattered areas of clayey soils that are more than 40 inches deep

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Poorly suited
Management concerns: Erodibility and large stones
Management measures and considerations:
- Terraces and diversions, contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize infiltration of rainfall.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Poorly suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.

- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope, depth to bedrock, and shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability and depth to bedrock
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Low strength
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

ToB—Townley silt loam, 2 to 6 percent slopes

Setting

Landform: Hillslopes
Landform position: Shoulder slopes and side slopes
Shape of areas: Irregular
Size of areas: 20 to 300 acres

Composition

Townley and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profiles

Surface layer:
0 to 5 inches—dark grayish brown silt loam

Subsurface layer:
5 to 12 inches—yellowish brown silt loam

Subsoil:
12 to 25 inches—strong brown silty clay
25 to 35 inches—strong brown silty clay loam

Underlying material:
35 to 80 inches—soft shale

Soil Properties and Qualities

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: 20 to 40 inches

Minor Components

Dissimilar soils:
- Townley soils that have a slope of less of than 2 percent or more than 6 percent
- Nauvoo soils, which have a loamy subsoil and are deep to soft bedrock

Similar soils:
- Scattered areas of clayey soils that have a surface layer of silty clay loam
- Scattered areas of soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Suited
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize infiltration of rainfall.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.

- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings

Suitability: Poorly suited
Management concerns: Shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields

Suitability: Poorly suited
Management concerns: Restricted permeability and depth to bedrock
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets

Suitability: Suited
Management concerns: Low strength

Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

ToD—Townley silt loam, 6 to 15 percent slopes

Setting

Landform: Hillslopes
Landform position: Shoulder slopes and backslopes
Shape of areas: Irregular
Size of areas: 20 to 300 acres

Composition

Townley and similar soils: 80 percent
Dissimilar soils: 20 percent

Typical Profiles

Surface layer:
0 to 5 inches—dark grayish brown silt loam

Subsurface layer:
5 to 12 inches—yellowish brown silt loam

Subsoil:
12 to 25 inches—reddish yellow silty clay
25 to 35 inches—reddish yellow silty clay loam

Underlying material:
35 to 80 inches—soft shale

Soil Properties and Qualities

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Slow
Available water capacity: High
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Moderate
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: 20 to 40 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- Townley soils that have a slope of less of than 6 percent or more than 15 percent
- Scattered areas of soils that are deep to bedrock

Similar soils:
- Scattered areas of clayey soils that have a surface layer of silty clay loam
- Scattered areas of soils that have a brownish subsoil

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland

Suitability: Poorly suited
Management concerns: Erodibility
Management measures and considerations:
- Terraces and diversions, contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize infiltration of rainfall.
- Cultivation should be restricted to the less sloping areas.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland

Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility and equipment use
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.

- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope and shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.
- Structures can be designed to conform to the natural slope.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability and depth to bedrock
Management measures and considerations:
- Increasing the size of the absorption field and installing the distribution lines on the contour improve the performance of the system.
- Installing distribution lines during dry periods minimizes smearing and sealing of trench walls.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Suited
Management concerns: Low strength and slope
Management measures and considerations:
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

Ur—Urban land

Setting

Landform: Ridges and stream terraces
Landform position: Summits, shoulder slopes, and backslopes
Shape of areas: Rectangular
Size of areas: 5 to 20 acres

Composition

Urban land: 95 percent
Dissimilar soils: 5 percent

Urban land consists mainly of high density commercial and industrial development, mostly in the vicinity of Centreville, Brent, and West Blocton. The original soils were altered by cutting and filling, shaping and grading, compacting, and covering with buildings, concrete, or asphalt.

Soil Properties and Qualities

Depth class: Variable
Drainage class: Variable
Permeability: Very slow
Available water capacity: Variable
Seasonal high water table: Variable
Shrink-swell potential: Variable
Flooding: Variable
Natural fertility: Low
Depth to bedrock: Variable

Minor Components

Dissimilar soils:
- Bama, Lucedale, and Smithdale soils near the edge of mapped areas

Land Use

Dominant uses: Residential, commercial, and industrial uses
Other uses: Unsuited to most other uses

Extensive reclamation efforts would be required to make areas suitable for use as cropland, pasture, hayland, forestland, or homesites or for wildlife habitat. Onsite investigation and testing are needed to determine the suitability of this unit for any use.

Interpretive Groups

Land capability classification: 8
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

W—Water

This map unit consists of areas that are covered with water throughout the year in most years. Areas include rivers, streams, natural and constructed lakes, pits, and ponds.

WbF—Wadley-Boykin complex, 15 to 35 percent slopes

Setting

Landform: Hillslopes
Landform position: Wadley—side slopes and footslopes; Boykin—backslopes and side slopes
Shape of areas: Irregular
Size of areas: 20 to 250 acres

Composition

Wadley and similar soils: 40 percent
Boykin and similar soils: 40 percent
Dissimilar soils: 20 percent

Typical Profiles

Wadley
Surface layer:
0 to 2 inches—very dark brown loamy sand
2 to 10 inches—dark grayish brown loamy sand

Subsurface layer:
10 to 14 inches—yellowish brown loamy sand
14 to 26 inches—light yellowish brown loamy sand
26 to 44 inches—brownish yellow loamy sand
44 to 68 inches—strong brown and brownish yellow sandy loam and loamy sand

Subsoil:
68 to 80 inches—reddish yellow sandy loam that has brownish mottles

Boykin
Surface layer:
0 to 4 inches—very dark grayish brown loamy sand

Subsurface layer:
4 to 20 inches—brown loamy sand
20 to 31 inches—yellowish brown loamy sand

Subsoil:
31 to 62 inches—yellowish red sandy clay loam
62 to 80 inches—yellowish red sandy clay loam that has reddish and brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Wadley—somewhat excessively drained; Boykin—well drained
Permeability: Rapid in the surface and subsurface layers and moderate in the subsoil
Available water capacity: Moderate
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The clayey Luverne and Maubila soils on the upper parts of slopes
- The loamy Smithdale soils on shoulder slopes and on crests of narrow ridges

Similar soils:
- Moderately well drained sandy soils on the lower parts of slopes
- Scattered areas of sandy soils that do not have loamy strata within a depth of 80 inches

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture

Cropland
Suitability: Unsuited
Management concerns: Slope
Management measures and considerations:
- This map unit is severely limited for crop production because of the steep slope.
- A site that has better suited soils should be selected.

Pasture and hayland
Suitability: Poorly suited to pasture; unsuited to hayland

Commonly grown crops: Bermudagrass and bahiagrass
Management concerns: Erodibility, equipment use, droughtiness, and nutrient leaching
Management measures and considerations:
- This map unit is difficult to manage for pasture and hayland because of the slope.
- Using equipment that has low-pressure tires increases traction and minimizes the rutting caused by the high content of sand in the soil.
- Using split applications increases the effectiveness of fertilizer and herbicides.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Erodibility, equipment use, seedling survival, and competition from undesirable plants
Management measures and considerations:
- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Using tracked or low-pressure ground equipment minimizes rutting and root compaction during harvesting.
- Planting high-quality seedlings in a shallow furrow increases the seedling survival rate.
- Leaving a buffer zone of trees and shrubs adjacent to streams helps to control siltation and provides shade for the surface of the water.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential of the Wadley soil to support habitat for: Openland wildlife—fair; forestland wildlife—poor; wetland wildlife—very poor
Potential of the Boykin soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility, equipment use, and droughtiness
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.
- Vegetating cleared-and-graded areas as soon as possible or constructing silt fences helps to maintain soil stability and helps to keep soil on the site.

Septic tank absorption fields
Suitability: Poorly suited

Management concerns: Slope
Management measures and considerations:
- Installing the distribution lines on the contour improves the performance of the system.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.
- Vegetating cut-and-fill slopes as soon as possible after construction helps to stabilize the soil and reduces the hazard of erosion.

Interpretive Groups

Land capability classification: 7e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes

Setting

Landform: Hillslopes
Landform position: Wadley and Boykin—side slopes and footslopes; Smithdale—shoulder slopes and back slopes
Shape of areas: Irregular
Size of areas: 20 to 400 acres

Composition

Wadley and similar soils: 45 percent
Smithdale and similar soils: 30 percent
Boykin and similar soils: 15 percent
Dissimilar soils: 10 percent

Typical Profiles

Wadley
Surface layer:
0 to 2 inches—very dark brown loamy sand
2 to 10 inches—dark grayish brown loamy sand

Subsurface layer:
10 to 14 inches—yellowish brown loamy sand
14 to 26 inches—light yellowish brown loamy sand
26 to 44 inches—brownish yellow loamy sand
44 to 68 inches—strong brown and brownish yellow sandy loam and loamy sand

Subsoil:
68 to 80 inches—reddish yellow sandy loam that has brownish mottles

Smithdale
Surface layer:
0 to 6 inches—brown sandy loam

Subsurface layer:
6 to 12 inches—yellowish brown sandy loam
12 to 18 inches—strong brown sandy clay loam

Subsoil:
18 to 43 inches—red sandy clay loam
43 to 60 inches—red sandy loam that has brownish mottles
60 to 71 inches—yellowish red sandy loam that has brownish mottles
71 to 80 inches—strong brown sandy loam that has light yellowish brown mottles

Boykin
Surface layer:
0 to 4 inches—very dark grayish brown loamy sand

Subsurface layer:
4 to 20 inches—brown loamy sand
20 to 31 inches—yellowish brown loamy sand

Subsoil:
31 to 62 inches—yellowish red sandy clay loam
62 to 80 inches—yellowish red sandy clay loam that has reddish and brownish mottles

Soil Properties and Qualities

Depth class: Very deep
Drainage class: Wadley—somewhat excessively drained; Smithdale and Boykin—well drained
Permeability: Wadley and Boykin—rapid in the surface and subsurface layers and moderate in the subsoil; Smithdale—moderate
Available water capacity: Wadley and Boykin—moderate; Smithdale—very high
Seasonal high water table: None within a depth of 6 feet
Shrink-swell potential: Low
Flooding: None
Content of organic matter in the surface layer: Low
Natural fertility: Low
Depth to bedrock: More than 80 inches

Minor Components

Dissimilar soils:
- The poorly drained Bibb and moderately well drained Iuka soils in narrow drainageways
- The clayey Luverne and Maubila soils on the upper parts of slopes

Similar soils:
- Scattered areas of moderately well drained, loamy soils that have a brownish subsoil
- Scattered areas of sandy soils that do not have loamy strata within a depth of 80 inches
- Moderately well drained, sandy soils on the lower parts of slopes

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Management concerns: Erodibility, equipment use, droughtiness, and nutrient leaching
Management measures and considerations:
- This map unit is difficult to manage for crop production because the slope limits the use of equipment.

- Contour tillage, no-till planting, crop residue management, stripcropping, and a crop rotation that includes soil conserving crops reduce the hazard of erosion, help to control surface runoff, and maximize rainfall infiltration.
- Using split applications increases the effectiveness of fertilizer and herbicides.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland

Suitability: Suited to pasture; poorly suited to hayland
Commonly grown crops: Coastal bermudagrass and bahiagrass
Management concerns: Erodibility, equipment use, droughtiness, and nutrient leaching
Management measures and considerations:

- Preparing seedbeds on the contour or across the slope reduces the hazard of erosion and increases the rate of germination.
- The slope may limit equipment use in the steeper areas when hay is harvested.
- Using split applications increases the effectiveness of fertilizer and herbicides.
- Fencing livestock away from creeks and streams helps to prevent streambank erosion and sedimentation.
- Proper stocking rates and restricted grazing during wet periods help to prevent compaction and keep the pasture in good condition.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland

Suitability: Suited
Productivity class: High for loblolly pine
Management concerns: Equipment use, erodibility, and competition from undesirable plants
Management measures and considerations:

- Constructing roads, fire lanes, and skid trails on the contour helps to overcome the slope limitations.
- Using tracked or low-pressure ground equipment minimizes rutting and root compaction during harvesting.
- Planting high-quality seedlings in a shallow furrow increases the seedling survival rate in areas of Wadley and Boykin soils.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat

Potential of the Wadley soil to support habitat for: Openland wildlife—fair; forestland wildlife—poor; wetland wildlife—very poor
Potential of the Smithdale soil to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Potential of the Boykin soil to support habitat for: Openland wildlife—fair; forestland wildlife—good; wetland wildlife—very poor
Management concerns: Erodibility, equipment use, and droughtiness
Management measures and considerations:

- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Structures can be designed to conform to the natural slope or can be built in the less sloping areas.
- Land grading or shaping prior to construction helps to control the damage caused by surface flow of water and reduces the hazard of erosion.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Installing the distribution lines on the contour improves the performance of the system.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Slope
Management measures and considerations:
- Designing roads to conform to the contour and providing adequate water-control structures, such as culverts, help to maintain the stability of the road.
- Vegetating cut-and-fill slopes as soon as possible after construction helps to stabilize the soil and reduces the hazard of erosion.

Interpretive Groups

Land capability classification: Wadley and Boykin—6s; Smithdale—6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded

Setting

Landform: Ridges
Landform position: Summits and shoulder slopes
Shape of areas: Irregular
Size of areas: 30 to 200 acres

Composition

Wilcox and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 4 inches—brown clay loam

Subsoil:
4 to 9 inches—yellowish red clay
9 to 18 inches—yellowish red clay that has grayish and brownish mottles
18 to 35 inches—yellowish red clay that has brownish and grayish mottles
35 to 46 inches—light brownish gray clay that has reddish, brownish, and grayish mottles

Substratum:
46 to 80 inches—grayish brown shale

Soil Properties and Qualities

Depth class: Deep
Drainage class: Somewhat poorly drained
Permeability: Very slow
Available water capacity: High
Seasonal high water table: Perched, at a depth of $1^1/_2$ to 3 feet from January through April
Shrink-swell potential: High
Flooding: None
Content of organic matter in the surface layer: Moderately low
Natural fertility: Low
Depth to bedrock: 40 to 60 inches

Minor Components

Dissimilar soils:
- The moderately well drained Boswell soils on shoulders and side slopes
- The well drained Luverne and Smithdale soils on knolls and shoulder slopes

Similar soils:
- Scattered areas of Conecuh soils that have a surface layer of fine sandy loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Suited
Commonly grown crops: Corn, small grains, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Contour farming, no-till planting, crop residue management, stripcropping, and sod-based rotations reduce the hazard of further erosion, stabilize the soils, control surface runoff, and maximize infiltration of rainfall.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Coastal bermudagrass, bahiagrass, tall fescue, and white clover
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of further erosion and increases the rate of germination.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use, competition from undesirable plants, and soil rutting

Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling morality rate, and improves early seedling growth.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Shrink-swell potential
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability, wetness, and depth to bedrock
Management measures and considerations:
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Shrink-swell potential and low strength
Management measures and considerations:
- Removing as much of the clay that has a high shrink-swell potential as possible and increasing the thickness of the base aggregate improve soil performance.
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to incorporate water-control structures, such as culverts, broad-based dips, and waterbars, helps to prevent slippage of cut-and-fill slopes.

Interpretive Groups

Land capability classification: 3e
Prime farmland status: Prime farmland
Hydric soil status: Not hydric

WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded

Setting

Landform: Ridges
Landform position: Summits, backslopes, and shoulder slopes
Shape of areas: Irregular
Size of areas: 30 to 250 acres

Composition

Wilcox and similar soils: 50 percent
Boswell and similiar soils: 30
Dissimilar soils: 20 percent

Typical Profiles

Wilcox
Surface layer:
0 to 4 inches—brown clay loam

Subsoil:
4 to 9 inches—yellowish red clay
9 to 18 inches—yellowish red clay that has grayish and brownish mottles
18 to 35 inches—yellowish red clay that has brownish and grayish mottles
35 to 46 inches—light brownish gray clay that has reddish, brownish, and grayish mottles

Substratum:
46 to 80 inches—grayish brown shale

Boswell
Surface layer:
0 to 5 inches—brown fine sandy loam

Subsurface layer:
5 to 10 inches—brown loam

Subsoil:
10 to 24 inches—red clay that has brownish mottles
24 to 41 inches—yellowish red clay that has grayish mottles
41 to 51 inches—mottled reddish, brownish, and grayish clay
51 to 73 inches—light brownish gray clay that has reddish and brownish mottles
73 to 80 inches—light gray clay loam

Soil Properties and Qualities

Depth class: Wilcox—deep; Boswell—very deep
Drainage class: Wilcox—somewhat poorly drained; Boswell—moderately well drained
Permeability: Very slow
Available water capacity: Wilcox—high; Boswell—very high
Seasonal high water table: Wilcox—perched at a depth of $1^1/_2$ to 3 feet; Boswell—none within a depth of 6 feet
Shrink-swell potential: High
Flooding: None
Content of organic matter in the surface layer: Wilcox—low; Boswell—moderate
Natural fertility: Low
Depth to bedrock: Wilcox—40 to 60 inches; Boswell—more than 80 inches

Minor Components

Dissimilar soils:
- The well drained Luverne soils on shoulder slopes
- The loamy, well drained Smithdale soils on knolls and shoulder slopes

Similar soils:
- Scattered areas of Conecuh soils that have a surface layer of fine sandy loam

Land Use

Dominant uses: Forestland and wildlife habitat
Other uses: Pasture and hayland

Cropland
Suitability: Poorly suited
Commonly grown crops: Corn, small grains, and truck crops
Management concerns: Erodibility
Management measures and considerations:
- Contour farming, no-till planting, crop residue management, stripcropping, and sod-based rotations reduce the hazard of further erosion, stabilize the soils, control surface runoff, and maximize infiltration of rainfall.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Pasture and hayland
Suitability: Well suited
Commonly grown crops: Coastal bermudagrass, bahiagrass, and tall fescue
Management concerns: Erodibility
Management measures and considerations:
- Preparing seedbeds on the contour or across the slope reduces the hazard of further erosion and increases the rate of germination.
- Applying lime and fertilizer on the basis of soil testing increases the availability of nutrients to plants and maximizes productivity.

Forestland
Suitability: Well suited
Productivity class: Very high for loblolly pine
Management concerns: Equipment use and competition from undesirable plants
Management measures and considerations:
- Unsurfaced roads may be impassable during wet periods because of the high content of clay in the soil.
- Logging when the soil has the proper moisture content helps to prevent rutting in the surface layer and the root damage caused by compaction.
- Special site preparation, such as harrowing and bedding, helps to establish seedlings, reduces the seedling morality rate, and improves early seedling growth.
- Site preparation practices, such as chopping, prescribed burning, and the application of herbicides, help to control competition from undesirable plants.

Wildlife habitat
Potential to support habitat for: Openland wildlife and forestland wildlife—good; wetland wildlife—very poor
Management concerns: Equipment use and erodibility
Management measures and considerations:
- Openland wildlife habitat can be improved by leaving undisturbed areas of vegetation around cropland and pasture. These areas provide wildlife with food and a place to rest.
- Forestland wildlife habitat can be improved by planting appropriate vegetation, maintaining the existing plant cover, or promoting the natural establishment of

desirable plants. Prescribed burning every 3 years, rotated among several small tracts of land, can increase the amount of palatable browse for deer and the number of seed-producing plants for quail and turkey.
- Wetland wildlife habitat can be improved by constructing shallow ponds that provide areas of open water for waterfowl and furbearers.

Dwellings
Suitability: Poorly suited
Management concerns: Shrink-swell potential and slope
Management measures and considerations:
- Reinforcing foundations and footings or backfilling with coarse-textured material helps to strengthen buildings and prevents the damage caused by shrinking and swelling.

Septic tank absorption fields
Suitability: Poorly suited
Management concerns: Restricted permeability; depth to bedrock in areas of the Wilcox soil
Management measures and considerations:
- This map unit is severely limited as a site for septic tank absorption fields because of the very slow permeability.
- The local health department can be contacted for additional guidance regarding sanitary facilities.

Local roads and streets
Suitability: Poorly suited
Management concerns: Shrink-swell potential and low strength
Management measures and considerations:
- Removing as much of the clay that has a high shrink-swell potential as possible and increasing the thickness of the base aggregate improve soil performance.
- Incorporating sand and gravel into the roadbed and compacting the roadbed help to overcome the low strength of the natural soil material.
- Designing roads to incorporate water-control structures, such as culverts, broad-based dips, and waterbars, helps to prevent slippage of cut-and-fill slopes.

Interpretive Groups

Land capability classification: 6e
Prime farmland status: Not prime farmland
Hydric soil status: Not hydric

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-term 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. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 5 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 37,015 acres in the survey area, or nearly 9 percent of the total acreage, meets the requirements for prime farmland. Scattered areas of this land are throughout the county, mainly in general soil map units 2, 3, 6, and 7, which are described under the heading "General Soil Map Units."

In some areas, land that does not meet the criteria for prime farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

The map units in the survey area that are considered prime farmland and farmland of statewide importance are listed at the end of this section. This list does not constitute a recommendation for a particular land use. The extent of each listed map unit is shown in table 4. The location is shown on the detail soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

The map units that meet the requirements for prime farmland are:

AnA Annemaine silt loam, 0 to 2 percent slopes, rarely flooded
AnB Annemaine silt loam, 2 to 5 percent slopes, rarely flooded
BaA Bama fine sandy loam, 0 to 5 percent slopes
BaB Bama fine sandy loam, 2 to 5 percent slopes
CaA Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded
CaB Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded
CcA Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded
CmA Columbus loam, 2 to 5 percent slopes, occasionally flooded
CoA Colwell sandy loam, 0 to 2 percent slopes
CoB Colwell sandy loam, 2 to 5 percent slopes
CuB Conecuh sandy loam 2 to 5 percent slopes
LdA Lucedale sandy loam, 0 to 2 percent slopes
LdB Lucedale sandy loam, 2 to 5 percent slopes
LnB Luverne sandy loam, 2 to 5 percent slopes
MvB Minvale gravelly silt loam, 2 to 6 percent slopes
ShA Savannah silt loam, 0 to 2 percent slopes
ShB Savannah silt loam, 2 to 5 percent slopes
WiB2 Wilcox clay loam, 2 to 5 percent slopes, eroded

The map units that meet the requirements for farmland of statewide importance are:

MkC2 Maubila flaggy loam, 2 to 8 percent slopes, eroded
NaC Nauvoo sandy loam, 2 to 8 percent slopes
SmC Smithdale sandy loam, 2 to 8 percent slopes

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. 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 estimated yields of the main crops and pasture plants are listed, and the system of land capability classification used by the Natural Resources Conservation Service is explained.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading "Detailed Soil Map Units." Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Yields per Acre

Tables 5 and 6 show the average yields per acre that can be expected of the principal crops under a high level of management. 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 land capability classification of map units in the survey area also is shown in the tables.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

Pasture yields are expressed in terms of animal unit months. An animal unit month (AUM) is the amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the yields tables are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

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

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of the soils in this survey area is given in the section “Detailed Soil Map Units” and in the yields tables.

Forestland Productivity and Management

The tables described in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forestland management.

Forestland Productivity

In table 7, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

In tables 8a through 8e, interpretive ratings are given for various aspects of forestland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect 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 management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. 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 management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for fire damage and seedling mortality are expressed as *low, moderate,* and *high*. Where these terms are used, the numerical 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. 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.

Table 8a

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.

Table 8b

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.

Table 8c

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 the 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.

Table 8d

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.

Table 8e

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

Tables 9a and 9b rate the soils according to limitations that affect their suitability for recreational development. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality (fig. 13), 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 these tables can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

Table 9a

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

Figure 13.—The Cahaba River National Wildlife Refuge, which provides many recreational opportunities in the east-central part of the county.

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.

Table 9b

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 10, 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 (fig. 14).

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

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 also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Figure 14.—The right-of-way for a gas pipeline in the northern part of the county. Restoring such areas provides good cover and food for wildlife and reduces the hazard of erosion.

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 also are considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

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 also are considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood 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 and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian olive, autumn olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, cedar, and juniper.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, wildrice, cordgrass, rushes, sedges, and reeds.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, deer, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Hydric Soils

Table 11 lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2004).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 2006) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 2004).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

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, reclamation material, roadfill, and topsoil; plan structures for water management; 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 12a and 12b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 12a

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.

Table 12b

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 13a and 13b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 13a

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.

Table 13b

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 14a and 14b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Table 14a

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table, 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 gravel or sand 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 gravel or sand, the soil is considered a likely source regardless of thickness. The assumption is that the gravel or sand layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of gravel and sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel or sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

Table 14b

In table 14b, the rating class terms are *good, fair,* and *poor*. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, and topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

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

Table 15 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are 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 particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering properties, physical and chemical properties, and pertinent soil and water features.

Engineering Soil Properties

Table 16 described in this section gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the 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 15 percent or more, 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 particle-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 particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

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.

Physical Soil Properties

Table 17 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

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.

Silt 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 the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33 kPa or 10 kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity refers to the ability of a soil to transmit water or air. The term “permeability,” as used in soil surveys, indicates saturated hydraulic conductivity (Ksat). The estimates in the table indicate the rate of water movement, in micrometers per second, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33 kPa or 10 kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is *low* if the soil has a linear extensibility of less than 3 percent; *moderate* if 3 to 6 percent; *high* if 6 to 9 percent; and *very high* if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In 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 factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the “National Soil Survey Handbook,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

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 18 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

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 texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

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 are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 20 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2006). 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 21 indicates the classification of the soil series 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 Udults (*Ud*, meaning humid, 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 Hapludults (*Hapl*, meaning minimal horizonation, plus *udult*, the suborder of the Ultisols that has a udic moisture regime).

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

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 class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, semiactive, thermic Typic Hapludults.

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.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993) and in the “Field Book for Describing and Sampling Soils” (Schoeneberger and others, 2002). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (Soil Survey Staff, 1999) and in “Keys to Soil Taxonomy” (Soil Survey Staff, 2006). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

In some instances, the typical pedon for a series is located outside Bibb County. The selection of a typical pedon is based on the range of characteristics of the series as it occurs throughout a particular major land resource area. The Saffell series, for example, is common in MLRA 133A (Southern Coastal Plain), which extends from Virginia to Louisiana. The typical pedon for the Saffell series is in Perry County, Alabama. The soil properties of this pedon are representative of the Saffell soils that occur not only in Perry County but also in Bibb County and other counties in MLRA 133A.

Annemaine Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Parent material: Loamy, marine sediments
Landscape: Coastal Plain
Landform: Low stream and river terraces
Landform position: Flat to slightly convex slopes
Slope: 0 to 5 percent
Taxonomic class: Fine, mixed, semiactive, thermic Aquic Hapludults

Commonly Associated Soils

Bibb, Cahaba, Columbus, Iuka, Myatt, and Riverview soils are commonly associated with the Annemaine soils.

- The poorly drained Bibb and somewhat poorly drained Iuka soils are in narrow flood plains and depressions.
- The well drained Cahaba soils are on the higher convex parts of terraces.
- The loamy Columbus soils are on the slightly lower parts of terraces.
- The poorly drained Myatt soils are in the lower, more concave positions.
- The well drained Riverview soils are in the slightly lower positions.

Typical Pedon

Annemaine silt loam, 0 to 2 percent slopes, rarely flooded; about 1.5 miles south of Centreville; NE$^{1}/_{4}$ sec. 1, T. 22 N., R. 9 E.; USGS Centreville West topographic quadrangle; lat. 32 degrees 55 minutes 8.9 seconds N. and long. 87 degrees 7 minutes 35.2 seconds W.

Ap—0 to 4 inches; brown (7.5YR 4/3) silt loam; weak medium granular structure; very friable; many fine and medium roots; few fine flakes of mica; strongly acid; abrupt smooth boundary.

Bt1—4 to 17 inches; yellowish red (5YR 4/6) clay loam; moderate medium subangular blocky structure; firm; common fine and medium roots; few faint clay films on faces of peds; common fine flakes of mica; few dark brown wormcasts; very strongly acid; gradual wavy boundary.

Bt2—17 to 26 inches; yellowish red (5YR 5/6) silty clay loam; strong medium subangular blocky structure; firm; few fine roots; few faint clay films on faces of peds; common fine flakes of mica; common medium faint yellowish red (5YR 4/6) and common medium prominent light yellowish brown (10YR 6/4) masses of iron accumulation; common medium prominent gray (10YR 6/1) iron depletions; very strongly acid; gradual wavy boundary.

Bt3—26 to 35 inches; yellowish red (5YR 5/6) silty clay loam; weak medium subangular blocky structure; firm; few faint clay films on faces of peds; common fine flakes of mica; many fine and medium faint yellowish brown (10YR 5/6) masses of iron accumulation; many fine and medium prominent gray (10YR 6/1) iron depletions; very strongly acid; clear wavy boundary.

BC—35 to 48 inches; 40 percent dark yellowish brown (10YR 4/6), 30 percent strong brown (7.5YR 5/6), and 10 percent gray (10YR 6/1) loam; massive; friable; many fine flakes of mica; areas of strong brown are iron accumulations; areas of gray are iron depletions; very strongly acid; gradual wavy boundary.

C—48 to 80 inches; 30 percent brownish yellowish (10YR 6/6), 20 percent strong brown (7.5YR 5/6), and 20 percent gray (10YR 6/1) sandy loam; massive; very friable; many fine flakes of mica; areas of strong brown are iron accumulations; areas of gray are iron depletions; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 or 4
Texture—silt loam or loam

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
Texture—silty clay loam, clay loam, silty clay, or clay
Redoximorphic features—few to many redoximorphic depletions in shades of gray and redoximorphic accumulations in shades of brown

BC horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8; or mottled in shades of red, brown, yellow, or gray
Texture—sandy clay loam, loam, or clay loam

C horizon:
Color—hue of 2.5YR to 10YR, value of 5 to 8, and chroma of 3 to 8; or no dominant matrix color and multicolored in shades of red, brown, or gray
Texture—sandy loam, loam, or sandy clay loam; commonly has strata of finer and coarser textured materials
Redoximorphic features—few to many redoximorphic depletions in shades of gray and redoximorphic accumulations in shades of red and brown

Bama Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy, fluvial or marine sediments
Landscape: Coastal Plain
Landform: Ridges
Landform position: Summits, shoulder slopes, and side slopes

Slope: 0 to 5 percent
Taxonomic class: Fine-loamy, siliceous, subactive, thermic Typic Paleudults

Commonly Associated Soils

Colwell, Lucedale, Luverne, Savannah, and Smithdale soils are commonly associated with the Bama soils.

- The Colwell soils are in landform positions similar to those of the Bama soils and have a dark red, clayey argillic horizon.
- The Lucedale soils are also in landform positions similar to those of the Bama soils and have a dark red argillic horizon.
- The Luverne soils are on side slopes and ridges at the lower elevations and have a clayey argillic horizon.
- The moderately well drained Savannah soils are at the lower elevations and have a fragipan.
- The Smithdale soils are on side slopes adjacent to areas of the Bama soils and have a decrease in clay content of 20 percent or more within a depth of 60 inches.

Typical Pedon

Bama fine sandy loam, 0 to 2 percent slopes (fig. 15); about 2 miles south of Centreville; Bibb County, Alabama; NE$^1/_4$ sec. 7, T. 22 N., R. 9 E.; USGS Centreville West topographic quadrangle; lat. 32 degrees 53 minutes 58.1 seconds N. and long. 87 degrees 12 minutes 45.4 seconds W.

Ap1—0 to 6 inches; brown (7.5YR 4/4) fine sandy loam; weak medium granular structure; friable; common fine roots; strongly acid; gradual wavy boundary.
Ap2—6 to 10 inches; dark brown (7.5YR 3/4) fine sandy loam; weak medium granular structure; friable; common fine roots; strongly acid; clear smooth boundary.
Bt1—10 to 29 inches; red (2.5YR 4/6) sandy clay loam; weak medium subangular blocky structure; friable; common fine roots; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt2—29 to 41 inches; red (2.5YR 4/6) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt3—41 to 61 inches; red (2.5YR 4/6) sandy clay loam; weak coarse subangular blocky structure; friable; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt4—61 to 72 inches; red (2.5YR 4/8) sandy clay loam; weak coarse subangular blocky structure; friable; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
BC—72 to 80 inches; red (2.5YR 4/8) sandy loam; weak coarse subangular blocky structure; friable; few faint clay films on faces of peds; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 80 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—fine sandy loam or sandy loam

BE horizon (where present):
Color—hue of 5YR or 7.5YR, value of 4 or 5, and chroma of 4 to 8
Texture—fine sandy loam, sandy loam, or loam

Figure 15.—A profile of a Bama soil. Bama soils formed in thick deposits of loamy sediments. They are very deep, well drained soils on summits of broad ridges and high stream terraces.

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8

Texture—sandy clay loam, loam, or clay loam

BC horizon (where present):
Color—hue of 2.5YR to 7.5YR, value of 3 to 6, and chroma of 6 to 8
Texture—sandy loam, loam, or sandy clay loam

Barfield Series

Depth class: Shallow
Drainage class: Well drained
Permeability: Moderately slow
Parent material: Limestone
Landscape: Appalachian Ridges and Valleys
Landform: Hillslopes
Landform position: Side slopes
Slope: 15 to 60 percent
Taxonomic class: Clayey, mixed, thermic, Lithic Hapludolls

Commonly Associated Soils

Minvale and Talbott soils are commonly associated with the Barfield soils.

- The Minvale soils are in the lower positions on side slopes and are very deep.
- The Talbott soils are in the smoother positions and are moderately deep to bedrock.

Typical Pedon

Barfield gravelly silt loam (fig. 16), in an area of Rock outcrop-Barfield complex, 15 to 60 percent slopes; about 4.0 miles north of Centreville; 250 feet east of Alabama highway 219 at Shultz Creek Bridge, then along north bank of Shultz Creek; NE$^1/_4$ sec. 2, T. 23 N., R. 9 E.; USGS West Blocton West topographic quadrangle; lat. 33 degrees 0 minutes 8.3 seconds N. and long. 87 degrees 8 minutes 51.8 seconds W.

A—0 to 6 inches; dark brown (10YR 3/3) gravelly silt loam; weak medium granular structure; friable; many fine, medium, and coarse roots; 15 percent limestone fragments; neutral; gradual wavy boundary.
Bw—6 to 10 inches; dark yellowish brown (10YR 4/4) clay; weak medium subangular blocky structure; firm; many fine, medium, and coarse roots; 10 percent limestone fragments; neutral; gradual wavy boundary.
BC—10 to 13 inches; dark yellowish brown (10YR 4/6) channery clay; mottles in shades of yellowish brown and strong brown; weak medium subangular blocky structure; firm; many fine and common medium and coarse roots; 25 percent limestone fragments; neutral; clear irregular boundary.
R—13 to 80 inches; limestone bedrock.

Range in Characteristics

Thickness of the solum: 8 to 20 inches
Depth to bedrock: 8 to 20 inches
Reaction: Slightly acid to slightly alkaline throughout the profile

A horizon:
Color—hue of 10YR, value of 2 or 3, and chroma of 2 or 3
Texture of the fine-earth fraction—silt loam or silty clay loam

Bw horizon:
Color—dominantly hue of 10YR, value of 2 or 3, and chroma of 2 or 3; hue of 10YR or 2.5Y, value of 4, and chroma of 3 or 4 in some pedons
Texture—silty clay loam, silty clay, or clay

Figure 16.—A profile of a Barfield soil. Barfield soils formed in residuum that weathered from limestone. These clayey, well drained soils have limestone bedrock at a depth of 10 to 20 inches.

BC horizon and C horizon (where present):

Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6; mottles in shades of brown, olive, and yellow; gray mottles directly above the bedrock in some pedons

Texture of the fine-earth fraction—silty clay loam, silty clay, or clay

The Barfield series is classified as vermiculitic, mixed, thermic Lithic Hapludolls. The Barfield soils in Bibb County, however, are taxadjuncts because they have mixed mineralogy, instead of vermiculitic. This difference is typical for the series as mapped in Alabama and does not significantly affect the use, management, or interpretations of the soils. In this survey area, the Barfield soils are clayey, mixed, thermic Lithic Hapludolls.

Bibb Series

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Parent material: Stratified loamy and sandy alluvium
Landscape: Coastal Plain
Landform: Flood plains

Landform position: Concave slopes
Slope: 0 to 1 percent
Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents

Commonly Associated Soils

Iuka, Kinston, and Mantachie soils and Fluvaquents are commonly associated with the Bibb soils.

- The Fluvaquents are in depressions that are ponded for long periods.
- The moderately well drained Iuka soils are on high parts of natural levees.
- The loamy Kinston soils are on broad flood plains in positions similar to those of the Bibb soils.
- The loamy, somewhat poorly drained Mantachie soils are in the slightly higher, more convex positions on flood plains.

Typical Pedon

Bibb sandy loam, in an area of Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded; about 2 miles south of Centreville; sec. 6, T. 22 N., R. 10 E.; USGS Centerville East topographic quadrangle; lat. 32 degrees 54 minutes 40.8 seconds N. and long. 87 degrees 6 minutes 51.2 seconds W.

A—0 to 2 inches; dark brown (10YR 3/3) sandy loam; weak fine granular structure; very friable; common fine, medium, and coarse roots; moderate medium prominent yellowish red (5YR 4/6) masses of iron accumulation along root channels; very strongly acid; clear smooth boundary.

Ag—2 to 8 inches; grayish brown (10YR 5/2) sandy loam; weak fine granular structure; very friable; common fine, medium, and coarse roots; few fine soft black masses of iron and manganese oxide; moderate medium prominent yellowish red (5YR 5/6) masses of iron accumulation along root channels; very strongly acid; gradual wavy boundary.

Cg1—8 to 19 inches; light brownish gray (2.5Y 6/2) sandy loam; massive; very friable; common fine and few medium roots; few fine soft black masses of iron and manganese oxide; few medium prominent yellowish red (5YR 4/6) and strong brown (7.5YR 5/8) masses of iron accumulation along root channels; very strongly acid; clear wavy boundary.

Cg2—19 to 38 inches; light brownish gray (2.5Y 6/2) sandy loam; massive; very friable; common fine and few medium roots; common thin strata of brownish yellow (10YR 6/6) sand; few fine soft black masses of iron and manganese oxide; few medium prominent yellowish red (5YR 4/6) and strong brown (7.5YR 5/8) masses of iron accumulation; very strongly acid; clear wavy boundary.

Cg3—38 to 55 inches; grayish brown (2.5Y 5/2) sandy loam; massive; very friable; few fine soft black masses of iron and manganese oxide; very strongly acid; clear wavy boundary.

Cg4—55 to 80 inches; gray (10YR 6/1) loamy sand; massive; very friable; few fine soft black masses of iron and manganese oxide; very strongly acid.

Range in Characteristics

Thickness of the underlying soil material: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A horizon:
Color—hue of 7.5YR or 10YR, value of 2 to 5, and chroma of 1 to 3
Texture—sandy loam, fine sandy loam, or silt loam

Redoximorphic features (where present)—iron depletions in shades of gray; masses of iron accumulation in shades of red, brown, or yellow

Ag horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 7, and chroma of 2 or less
Texture—sandy loam, fine sandy loam, or silt loam
Redoximorphic features—masses of iron accumulation in shades of red, brown, or yellow

Cg horizon:

Color—hue of 10YR to 5BG, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam, loam, or silt loam in the upper part and sand or loamy sand in lower part; thin strata of finer or coarser textured material in some pedons
Redoximorphic features—masses of iron accumulation in shades of red, brown, or yellow

Bodine Series

Depth class: Very deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid
Parent material: Residuum and colluvium from cherty limestone
Landscape: Appalachian Ridges and Valleys
Landform: Hillslopes
Landform position: Slightly concave side slopes and foot slopes
Slope: 6 to 50 percent
Taxonomic class: Loamy-skeletal, siliceous, semiactive, thermic Typic Paleudults

Commonly Associated Soils

Fullerton, Iuka, and Minvale soils are commonly associated with the Bodine soils.

- The Fullerton soils are in less sloping positions than those of the Bodine soils and have a clayey subsoil.
- The moderately well drained Iuka soils are in drainageways in the lower positions.
- The Minvale soils are in the higher positions and have less than 35 percent fragments in the control section.

Typical Pedon

Bodine very gravelly silt loam, 6 to 15 percent slopes, stony; about 2 miles southeast of West Blocton; Bibb County, Alabama; NE$^{1}/_{4}$ sec. 27, T. 24 N., R. 5 W.; USGS West Blocton East topographic quadrangle; lat. 33 degrees 2 minutes 14.9 seconds N. and long. 87 degrees 3 minutes 26.2 seconds W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) very gravelly silt loam; weak medium granular structure; friable; common fine and very fine roots; about 40 percent, by volume, chert fragments up to 3 inches in diameter; strongly acid; clear smooth boundary.

E—6 to 14 inches; yellowish brown (10YR 5/4) very gravelly silt loam; weak medium granular structure; friable; common fine roots; about 50 percent chert fragments up to 3 inches in diameter; strongly acid; clear smooth boundary.

BE—14 to 25 inches; yellowish brown (10YR 5/4) extremely gravelly silt loam; weak fine subangular blocky structure; friable; common fine roots; about 60 percent chert fragments up to 3 inches in diameter; strongly acid; abrupt smooth boundary.

Bt1—25 to 38 inches; brown (7.5YR 5/4) extremely gravelly silt loam; weak medium subangular blocky structure; few fine roots; common fine prominent strong brown

(7.5YR 4/6) masses of iron accumulation; about 75 percent chert fragments ranging from 1 to 4 inches in diameter; strongly acid; clear smooth boundary.

Bt2—38 to 58 inches; strong brown (7.5YR 5/6) extremely gravelly silt loam; moderate medium subangular blocky structure; common fine prominent yellowish red (5YR 5/6) masses of iron accumulation; about 75 percent chert fragments ranging from 2 to 12 inches in diameter; strongly acid; gradual wavy boundary.

Bt3—58 to 80 inches; strong brown (7.5YR 5/8) extremely gravelly silty clay loam; moderate medium subangular blocky structure; common fine prominent red (2.5YR 5/6) masses of iron accumulation; about 70 percent chert fragments ranging from 2 to 12 inches in diameter; strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: 60 to more than 80 inches
Rock fragments: 20 to 60 percent pebbles and cobbles in the A and E horizons; 35 to 80 percent pebbles, cobbles, stones, and boulders in the Bt horizon
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A horizon:
Color—hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3
Texture—gravelly loam, gravelly silt loam, very gravelly loam, or very gravelly silt loam

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 or 4
Texture—silt loam or loam or their very gravelly or extremely gravelly analogs

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 6 to 8
Texture—silt loam or silty clay loam or their very gravelly or extremely gravelly analogs
Redoximorphic features (where present)—iron or clay depletions in shades of brown or white and iron accumulations in shades of brown or red in the lower part of the horizon

Boswell Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Very slow
Parent material: Acid, clayey, marine sediments
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Convex summits, shoulder slopes, and side slopes
Slope: 5 to 15 percent
Taxonomic class: Fine, mixed, active, thermic Vertic Paleudalfs

Commonly Associated Soils

Luverne, Smithdale, and Wilcox soils are commonly associated with the Boswell soils.

- The well drained Luverne and somewhat poorly drained Wilcox soils are in positions similar to those of the Boswell soils.
- The loamy, well drained Smithdale soils are in the slightly higher positions and on knolls.

Typical Pedon

Boswell fine sandy loam, in an area of Wilcox-Boswell complex, 5 to 15 percent slopes, eroded; Bibb County, Alabama; about 6 miles west of Randolph; NE1/4 sec. 7, T. 22 N., R. 11 E.; USGS Centreville East topographic quadrangle; lat. 32 degrees 54 minutes 28.7 seconds N. and long. 87 degrees 0 minutes 5.3 seconds W.

Ap—0 to 5 inches; brown (7.5YR 4/3) fine sandy loam; moderate medium granular structure; friable; many very fine and fine and few medium roots; very strongly acid; clear wavy boundary.

BE—5 to 10 inches; brown (7.5YR 4/4) loam; weak fine subangular blocky structure; friable; many very fine and fine and few medium roots; very strongly acid; clear wavy boundary.

Bt1—10 to 24 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure; firm; common very fine and few fine and medium roots; many pressure faces; few faint clay films on faces of peds; common medium distinct light yellowish brown (10YR 6/4) and yellowish brown (10YR 5/8) masses of iron accumulation; very strongly acid; clear wavy boundary.

Bt2—24 to 41 inches; yellowish red (5YR 5/6) clay; moderate medium subangular blocky structure; firm; few fine and medium roots; many pressure faces; few faint clay films on faces of peds; common medium prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear wavy boundary.

Bt3—41 to 51 inches; 45 percent red (10R 4/6), 35 percent reddish brown (5YR 5/4), and 20 percent light gray (10YR 7/1) clay; strong medium subangular blocky structure; firm; few fine and medium roots; few faint clay films on faces of peds; areas of red and brown are masses of iron accumulation; areas of gray are iron depletions; very strongly acid; gradual wavy boundary.

Bt4—51 to 73 inches; light brownish gray (10YR 6/2) clay; strong medium subangular blocky structure; firm; few fine and medium roots; few faint clay films on faces of peds; few fine fragments of ironstone; many coarse prominent red (10R 4/6) and few medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Bt5—73 to 80 inches; light gray (10YR 7/1) clay loam; moderate medium platy structure; firm; few faint clay films on faces of peds; many medium prominent red (10R 4/6) and few medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 60 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 or 3
Texture—fine sandy loam or sandy loam

BE horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—loam, fine sandy loam, or sandy loam

Bt horizon:
Color—dominantly hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8; in some pedons, no dominant color in the lower part and multicolored in shades of red, brown, and gray
Texture—clay, clay loam, or silty clay

Boykin Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Sandy and loamy sediments
Landscape: Coastal Plain
Landform: Hillslopes
Landform position: Side slopes and footslopes
Slope: 5 to 35 percent
Taxonomic class: Loamy, siliceous, active, thermic Arenic Paleudults

Commonly Associated Soils

Maubila, Smithdale, and Wadley soils are commonly associated with the Boykin soils.

- The clayey, moderately well drained Maubila soils are in positions similar to those of the Boykin soils and on knolls.
- The Smithdale soils are in the slightly higher positions.
- The somewhat excessively drained Wadley soils are in positions similar to those of the Boykin soils and have a sandy epipedon that is more than 40 inches thick.

Typical Pedon

Boykin loamy sand (fig. 17), in an area of Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes; about 0.5 mile south of Lightseys Pond; Bibb County, Alabama; NW$^1/_4$ sec. 7, T. 22 N., R. 10 E.; USGS Centreville East topographic quadrangle; lat. 32 degrees 54 minutes 20.1 seconds N. and long. 87 degrees 6 minutes 54.2 seconds W.

Ap—0 to 4 inches; very dark grayish brown (10YR 3/2) loamy sand; weak medium granular structure; very friable; common fine and medium roots; strongly acid; clear wavy boundary.
E1—4 to 8 inches; brown (10YR 4/3) loamy sand; weak coarse subangular structure; very friable; common fine and medium roots; strongly acid; clear wavy boundary.
E2—8 to 20 inches; brown (10YR 5/3) loamy sand; weak coarse subangular blocky structure; very friable; few fine roots; few quartzite pebbles; strongly acid; gradual wavy boundary.
E3—20 to 31 inches; yellowish brown (10YR 5/4) loamy sand; weak coarse subangular blocky structure; very friable; few fine roots; few quartzite pebbles; strongly acid; clear wavy boundary.
Bt1—31 to 49 inches; yellowish red (5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt2—49 to 62 inches; yellowish red (5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; common clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt3—62 to 80 inches; yellowish red (5YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; common fine distinct brownish yellow (10YR 6/8) and red (2.5YR 4/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid to slightly acid in A and E horizons, except in areas where lime has been applied

Figure 17.—A profile of a Boykin soil. Boykin soils are well drained and are on summits and side slope in the uplands. They have an argillic horizon of reddish sandy loam and sandy clay loam underlying a thick epipedon of loamy sand.

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4

Texture—loamy fine sand or loamy sand

E horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 2 to 4
Texture—loamy fine sand or loamy sand

Bt horizon:
Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8
Texture—fine sandy loam or sandy clay loam
Redoximorphic features—few or common masses of iron accumulation in shades of red, brown, or yellow

Brilliant Series

Depth class: Deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid
Parent material: Mine spoil around coal mining operations
Landscape: Appalachian Plateaus
Landform: Hillslopes and ridges
Landform position: Convex to smooth side slopes
Slope: 6 to 45 percent
Taxonomic class: Loamy-skeletal, mixed, active, nonacid, thermic Typic Udorthents

Commonly Associated Soils

Montevallo, Palmerdale, and Townley soils are commonly associated with the Brilliant soils.

- The Montevallo soils are shallow to bedrock.
- The Palmerdale soils are in positions similar to those of the Brilliant soils but are derived from acid mine spoil.
- The well drained Townley soils are moderately deep to shale and have a clayey subsoil.

Typical Pedon

Brilliant very channery silt loam, in an area of Palmerdale and Brilliant soils, 6 to 45 percent slopes; 0.6 mile south of Hall Mills; Bibb County, Alabama; SW1/4 sec. 14, T. 21 N., R. 5 W.; USGS Half Mile Shoals topographic quadrangle; lat. 33 degrees 12 minutes 27.5 seconds N. and long. 87 degrees 2 minutes 13.7 seconds W.

A—0 to 4 inches; brown (10YR 4/3) very channery silt loam; weak medium granular structure; friable; common fine and common medium roots; about 50 percent fragments, mostly broken shale, sandstone, and coal; slightly acid; clear wavy boundary.
C1—4 to 21 inches; brown (10YR 5/3) extremely channery silt loam; weak medium granular structure; friable; about 70 percent fragments, mostly broken shale, sandstone, and coal; very slightly acid; gradual wavy boundary.
C2—21 to 42 inches; olive brown (2.5Y 5/3) extremely channery silt loam; weak medium granular structure; friable; about 70 percent fragments, mostly broken shale, sandstone, and coal; very neutral; gradual wavy boundary.
C3—42 to 65 inches; olive brown (2.5Y 5/3) extremely channery silty clay loam; weak medium granular structure; friable; about 70 percent fragments, mostly broken shale, sandstone, and coal; slightly acid; gradual wavy boundary
C4—65 to 80 inches; light yellowish brown (2.5Y 6/4) extremely channery silty clay loam; weak medium granular structure; friable; about 70 percent fragments, mostly broken shale, sandstone, and coal; moderately acid.

Range in Characteristics

Thickness of the solum: Spoil material is thicker than 60 inches.
Depth to bedrock: More than 80 inches
Rock fragments: Shale, sandstone, or coal fragments; 60 to 90 percent
Reaction: Neutral to moderately acid throughout

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 3 to 5, and chroma of 1 to 4
Texture of the fine-earth fraction—sandy loam, loam, or silt loam

C horizon:
Color—hue of 10YR to 5Y, value of 3 to 5, and chroma of 1 to 4; commonly variegated in shades of red, brown, yellow, and gray from highly weathered shale that has platy relict rock structure
Texture of the fine-earth fraction—silt loam, loam, or silty clay loam

Cahaba Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy and sandy sediments
Landscape: Coastal Plain
Landform: Low stream terraces
Landform position: Slightly convex interfluves
Slope: 0 to 5 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Annemaine, Columbus, Kinston, Mantachie, and Riverview soils are commonly associated with the Cahaba soils.

- The Annemaine soils are in positions similar to those of the Cahaba soils but have more clay in the argillic horizon.
- The moderately well drained Columbus soils are in the slightly lower positions.
- The fine-loamy, poorly drained Kinston and somewhat poorly drained Mantachie soils are in the slightly lower positions and on adjacent flood plains.
- The well drained Riverview soils are on the slightly lower, less convex parts of flood plains.

Typical Pedon

Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded; Bibb County, Alabama; about 2 miles southwest of Centerville; NE¼ sec. 17, T. 22 N., R. 9 E.; USGS Centerville West topographic quadrangle; lat. 32 degrees 53 minutes 32.4 seconds N. and long. 87 degrees 11 minutes 23.2 seconds W.

Ap1—0 to 3 inches; dark brown (7.5YR 3/2) sandy loam; weak medium granular structure; very friable; common fine and coarse roots; strongly acid; clear smooth boundary.
Ap2—3 to 6 inches; brown (7.5YR 4/4) fine sandy loam; weak medium granular structure; very friable; common fine and coarse roots; about 1 percent fine rounded quartz pebbles; strongly acid; clear smooth boundary.
BA—6 to 13 inches; red (2.5YR 5/6) fine sandy loam; weak fine subangular blocky structure; very friable; common fine and medium and few coarse roots; about 3 percent fine rounded quartz pebbles; strongly acid; clear wavy boundary.

Bt1—13 to 30 inches; red (2.5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; friable; common medium and fine roots; common distinct clay films on faces of peds; about 3 percent fine rounded quartz pebbles; strongly acid; gradual wavy boundary.
Bt2—30 to 44 inches; red (2.5YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; common fine roots; common distinct clay films on faces of peds; about 3 percent fine rounded quartz pebbles; common fine flakes of mica; strongly acid; gradual wavy boundary.
BC—44 to 56 inches; red (2.5YR 5/6) sandy loam; weak coarse subangular blocky structure; very friable; common fine roots; few faint clay films on faces of peds; about 3 percent fine rounded quartz pebbles; common fine flakes of mica; strongly acid; gradual wavy boundary.
C1—56 to 72 inches; red (2.5YR 4/8) sandy loam; massive; few common thin strata of loamy sand; very friable; few fine roots; strongly acid; gradual wavy boundary.
C2—72 to 80 inches; red (2.5YR 5/8) sandy loam; massive; thin strata of loamy sand; very friable; few fine roots; strongly acid.

Range in Characteristics

Thickness of the solum: 36 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR or 7.5YR, value of 3 to 5, and chroma of 2 to 4
Texture—loamy sand, sandy loam, or fine sandy loam

BA horizon (where present):
Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8
Texture—fine sandy loam, sandy loam, or loam

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

BC or CB horizon (where present):
Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8
Mottles—shades of red, brown, and yellow
Texture—sandy loam or loam

C horizon:
Color—hue of 2.5YR to 10YR, value of 4 or 5, and chroma of 6 to 8
Mottles—shades of red, brown, and yellow
Texture—sandy loam, loamy sand, sand, or stratified with those textures

Choccolocco Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy and silty, fluvial deposits
Landscape: Limestone Valleys and Uplands
Landform: Flood plains
Landform position: Smooth slopes
Slope: 0 to 2 percent
Taxonomic class: Fine-silty, mixed, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Bibb soils are commonly associated with the Choccolocco soils.

- The Bibb soils are in the lower positions and are poorly drained.

Typical Pedon

Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded; 1.0 mile east of Briarfield; Bibb County, Alabama; SW1/4 sec. 14, T. 24 N., R. 11 E.; USGS Aldrich topographic quadrangle; lat. 33 degrees 3 minutes 46.7 seconds N. and long. 86 degrees 56 minutes 9.4 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) silt loam; moderate medium granular structure; very friable; common fine and medium roots; strongly acid; clear smooth boundary.
Bt1—8 to 20 inches; strong brown (7.5YR 4/6) silty clay loam; weak fine subangular structure; friable; common fine and medium roots; strongly acid; gradual wavy boundary.
Bt2—20 to 35 inches; strong brown (7.5YR 5/6) silty clay loam; weak medium subangular structure; friable; common fine roots; few medium distinct black (10YR 2/1) concentrations of manganese oxide; strongly acid; gradual wavy boundary.
Bt3—35 to 45 inches; strong brown (7.5YR 4/6) silty clay loam; weak medium subangular blocky structure; friable; few fine roots; common fine distinct gray (10YR 5/1) areas iron depletions on faces of peds and common medium distinct strong brown (7.5YR 4/6) masses of concentrations in root channels; common medium distinct black concentrations of manganese oxide on faces of peds; strongly acid; gradual wavy boundary.
BC—45 to 57 inches; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; common medium distinct yellowish brown (10YR 5/8) masses of concentrations in root channels; common medium distinct black (10YR 2/1) concentrations of manganese oxide on faces of peds; strongly acid; clear wavy boundary.
C—57 to 80 inches; dark yellowish brown (10YR 4/4) sandy loam; massive; friable; few very fine roots; many black masses of iron stains; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to more than 60 inches
Depth to bedrock: More than 60 inches
Content and size of rock fragments: 5 percent or less throughout the profile
Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 2.5Y to 7.5YR, value of 3 to 6, and chroma of 2 to 6
Texture—silt loam

Bt horizon:
Color—hue of 10YR or 7.5YR, value of 4 to 6, and chroma of 3 to 8
Texture—silt loam or silty clay loam
Redoximorphic features—iron or clay depletions in shades of gray or brown and iron and/or manganese accumulations in shades of red and black

BC and C horizons:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 to 8
Texture—fine sandy loam, silt loam, or sandy loam
Redoximorphic features (where present)—iron accumulations in shades of yellow, brown, or red

Columbus Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate
Parent material: Loamy, marine deposits
Landscape: Coastal Plain
Landform: Low stream and river terraces
Landform position: Flat to slightly convex slopes
Slope: 0 to 2 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults

Commonly Associated Soils

Annemaine and Cahaba soils are commonly associated with the Columbus soils.

- The clayey Annemaine soils are on the slightly higher, convex parts of the terraces.
- The well drained Cahaba soils are on the higher, convex parts of the terraces.

Typical Pedon

Columbus loam, 0 to 2 percent slopes, occasionally flooded; about 1.5 miles southwest of Centreville; SW1/4 sec. 33, T. 23 N., R. 10 E.; USGS Centreville East topographic quadrangle; lat. 32 degrees 55 minutes 48.4 seconds N. and long. 87 degrees 4 minutes 23.8 seconds W.

Ap1—0 to 6 inches; dark yellowish brown (10YR 4/4) loam; weak medium granular blocky structure; friable; many fine and medium and common coarse roots; strongly acid; clear smooth boundary.

Ap2—6 to 9 inches; dark yellowish brown (10YR 4/6) loam; weak medium granular structure; friable; many fine and medium and common coarse roots; very strongly acid; clear smooth boundary.

Bt1—9 to 18 inches; strong brown (7.5YR 4/6) clay loam; weak fine subangular blocky structure; few faint medium yellowish brown (10YR 5/6) masses of iron accumulation; friable; common fine and medium and few coarse roots; very strongly acid; clear smooth boundary

Bt2—18 to 22 inches; strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; common fine and medium and few coarse roots; common faint clay films on faces of peds; common medium prominent pale brown (10YR 6/3) iron depletions; very strongly acid; gradual wavy boundary.

Bt3—22 to 32 inches; strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium and few coarse roots; common distinct clay films on faces of peds; common medium prominent light brownish gray (10YR 6/2) iron depletions; common medium distinct red (2.5YR 4/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Bt4—32 to 42 inches; dark yellowish brown (10YR 4/6) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium roots; few clay films on faces of peds; common medium faint strong brown (7.5YR 5/6) and common fine prominent red (2.5YR 4/6) and faint yellowish red (5YR 4/6) masses of iron accumulation; common medium prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; gradual wavy boundary.

BC—42 to 54 inches; strong brown (7.5YR 5/6) sandy loam; many medium prominent light brownish gray (10YR 6/2) iron depletions; many medium prominent red (2.5YR 4/6) and faint strong brown (7.5YR 5/6) and common medium distinct yellowish red (5YR 5/6) masses of iron accumulations; weak medium subangular blocky structure; friable; few fine roots; few faint clay films on faces of peds; common fine soft black masses of iron and manganese oxide; very strongly acid; gradual wavy boundary.

Btb—54 to 80 inches; 35 percent yellowish brown (10YR 5/6), 25 percent light brownish gray (2.5Y 6/2), 20 percent yellowish red (5YR 5/6), and 20 percent red (2.5YR 4/6) clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine streaks of uncoated sand; common fine soft black masses of iron and manganese oxide; very strongly acid.

Range in Characteristics

Thickness of the solum: 35 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 to 6
Texture—loam, sandy loam, or fine sandy loam

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 2 to 6
Texture—loam or sandy loam

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 to 8
Texture—sandy clay loam or clay loam
Redoximorphic features—iron or clay depletions in shades of gray or pale brown and masses of iron accumulation in shades of red, brown, or yellow

BC horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 to 8; or no dominant matrix color and multicolored in shades of red, brown, yellow, and gray
Texture—loam, fine sandy loam, or sandy clay loam
Redoximorphic features—common or many iron or clay depletions in shades of gray or pale brown and masses of iron accumulation in shades of red, brown, or yellow

C horizon (where present):
Color—hue of 10YR, value of 5 or 6, and chroma of 3 to 8; or no dominant color and multicolored in shades of red, brown, yellow, and gray
Texture—sandy loam or loamy sand
Redoximorphic features—iron or clay depletions in shades of gray or pale brown and masses of iron accumulation in shades of red, brown, or yellow

Colwell Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Clayey, marine or fluvial sediments
Landscape: Coastal Plain
Landform: High stream terraces and ridges
Landform position: Summits and interfluves
Slope: 0 to 5 percent
Taxonomic class: Fine, kaolinitic, thermic Rhodic Paleudults

Commonly Associated Soils

Bama, Lucedale, and Smithdale soils are commonly associated with the Colwell soils.

- The Bama soils are in positions similar to those of the Colwell soils but do not have a clayey, rhodic argillic horizon.
- The Lucedale soils are in positions similar to those of the Colwell soils but do not have a clayey argillic horizon.
- The Smithdale soils are on side slopes adjacent to areas of the Colwell soils, are on ridges at the lower elevations, have a 20 percent decrease in clay content at a depth of 60 inches, and are not rhodic.

Typical Pedon

Colwell sandy loam, 2 to 5 percent slopes; 6.0 miles south of Centreville; Bibb County, Alabama; 700 feet south and 2,200 feet west of the northeast corner of sec. 32, T. 22 N., R. 10 E.; USGS Oakmulgee topographic quadrangle; lat. 32 degrees 50 minutes 54.6 seconds N. and long. 87 degrees 5 minutes 38.6 seconds W.

Ap1—0 to 4 inches; dark brown (7.5YR 3/2) sandy loam; weak medium granular structure; friable; many fine and common medium and coarse roots; very strongly acid; clear wavy boundary.

Ap2—4 to 7 inches; brown (7.5YR 4/4) sandy loam; weak medium granular structure; friable; many fine and common medium and coarse roots; very strongly acid; clear wavy boundary.

BE—7 to 10 inches; 60 percent dark red (2.5YR 3/6) and 40 percent red (2.5YR 4/6) sandy loam; moderate medium subangular blocky structure; friable; many fine and common medium roots; very strongly acid; gradual wavy boundary.

Bt1—10 to 29 inches; dark red (2.5YR 3/6) clay; moderate medium subangular blocky structure; firm; common fine and medium roots; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt2—29 to 42 inches; dark red (2.5YR 3/6) clay; weak medium subangular blocky structure; firm; common fine roots; common faint clay films on the faces of peds; very strongly acid; gradual wavy boundary.

Bt3—42 to 61 inches; dark red (2.5YR 3/6) clay; weak coarse subangular blocky structure; firm; few fine roots; common faint clay films on the faces of peds; very strongly acid; gradual wavy boundary.

Bt4—61 to 80 inches; dark red (2.5YR 3/6) clay; weak coarse subangular blocky structure; firm; few fine distinct clay films on the faces of peds; about 5 percent rounded quartzite pebbles; few fine prominent reddish yellow (7.5YR 6/6) masses of iron accumulation that are relict redoximorphic features; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

Ap horizon:
Color—hue of 2.5YR to 7.5YR, value of 3 or 4, and chroma of 2 to 6
Texture—sandy loam or loam

BA or BE horizon (where present):
Color—hue of 2.5YR to 7.5YR, value of 3 to 5, and chroma of 4 to 6; or multicolored
Texture—sandy loam or loam

Bt horizon:
Color—hue of 10R or 2.5YR, value of 3, and chroma of 4 to 6
Texture—clay, sandy clay, or clay loam
Redoximorphic features—none to common relict accumulations or depletions in shades of brown or yellow

Conecuh Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Very slow
Parent material: Clayey and shaley, marine sediments
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Convex summits, shoulder slopes, and side slopes
Slope: 2 to 15 percent
Taxonomic class: Fine, smectitic, thermic Vertic Hapludults

Commonly Associated Soils

The Luverne and Smithdale soils are commonly associated with the Conecuh soils.

- The well drained Luverne soils are in positions similar to those of the Conecuh soils.
- The loamy, well drained Smithdale soils are in the slightly higher positions and on knolls.

Typical Pedon

Conecuh sandy loam, in an area of Conecuh-Luverne complex, 5 to 15 percent slopes, eroded; about .01 mile east of Lick Branch; Bibb County, Alabama; NE$^1/_4$ sec. 17, T. 23 N., R. 8 E.; USGS Pondville topographic quadrangle; lat. 32 degrees 58 minutes 21.6 seconds N. and long. 87 degrees 17 minutes 12.2 seconds W.

Ap—0 to 5 inches; brown (7.5YR 4/4) sandy loam; weak medium granular structure; friable; common fine, medium, and coarse roots; 10 percent ironstone channers; very strongly acid; gradual smooth boundary.

Bt1—5 to 12 inches; yellowish red (5YR 4/6) clay; moderate medium subangular blocky structure; firm; common coarse and medium and common fine roots; common fine clay films on faces of peds; 5 percent ironstone channers; very strongly acid; gradual wavy boundary.

Bt2—12 to 18 inches; yellowish red (5YR 4/6) clay; moderate medium subangular blocky structure parting to weak fine subangular blocky; firm; common fine roots; common distinct continuous clay films on faces of peds; common fine flakes of mica; very strongly acid; gradual wavy boundary.

Bt3—18 to 25 inches; yellowish red (5YR 5/6) and pinkish gray (7.5YR 7/2) clay; moderate medium subangular blocky structure parting to weak fine subangular blocky; firm; few fine roots; common or many distinct continuous clay films on faces of peds; common fine flakes of mica; areas of yellowish red are masses of iron accumulation; areas of pinkish gray are iron depletions; very strongly acid; gradual wavy boundary.

Bt4—25 to 41 inches; red (2.5YR 4/6) clay; moderate coarse subangular blocky structure parting to strong angular blocky; firm; few or common slickensides; many fine prominent yellowish brown (10YR 5/6) masses of iron accumulation; common fine distinct pinkish gray (10YR 7/2) iron depletions; very strongly acid; gradual wavy boundary.

BC—41 to 55 inches; 30 percent strong brown (7.5YR 5/6), 25 percent red (2.5YR 4/6), 20 percent brownish yellow (10YR 6/8), and 10 percent light gray (10YR 6/1) clay loam; moderate medium subangular blocky structure; firm; very strongly acid; gradual wavy boundary.

C—55 to 80 inches; 35 percent strong brown (7.5YR 5/6), 25 percent red (2.5YR 5/6), 20 percent brownish yellow (10YR 6/6), and 10 percent light gray (10YR 6/1) sandy clay loam; massive; friable; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches
Depth to bedrock: More than 60 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 6, and chroma of 2 to 4
Texture—sandy loam or fine sandy loam

Bt horizon (upper part):
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8
Texture—clay or silty clay
Redoximorphic features—iron or clay depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Bt horizon (lower part):
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8
Texture—clay or silty clay
Redoximorphic features—iron or clay depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

BC horizon:
Color—hue of 5YR to 5Y, value of 4 to 7, and chroma of 1 to 6; or no dominant color and multicolored in shades of red, brown, yellow, and gray
Texture—clay loam or clay

C horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 6; or no dominant color and multicolored in shades of red, brown, yellow, and gray
Texture—clay, clay loam, or sandy clay loam
Redoximorphic features—iron or clay depletion in shades of brown or gray and iron accumulation in shades of red, brown, or yellow

Fullerton Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Residuum weathered from cherty limestone
Landscape: Limestone Valleys and Uplands
Landform: Ridges and side slopes
Landform position: Smooth and concave side slopes
Slope: 6 to 15 percent
Taxonomic class: Fine, kaolinitic, thermic Typic Paleudults

Commonly Associated Soils

Bibb, Bodine, Iuka, and Minvale soils are commonly associated with the Fullerton soils.

- The Bodine soils are in the lower positions and have a very deep, loamy-skeletal subsoil.

- The moderately well drained Iuka and poorly drained Bibb soils are on the lower flood plains and in narrow drainageways.
- The Minvale soils are in positions similar to those of the Fullerton soils but have a browner, loamy subsoil.

Typical Pedon

Fullerton gravelly silt loam, 6 to 15 percent slopes; Bibb County, Alabama; about 0.25 mile south of Little Cahaba River; 1,200 feet east and 600 feet south of the northwest corner of sec. 20, T. 24 N., R. 11 E.; USGS Aldrich topographic quadrangle; lat. 33 degrees 3 minutes 14.0 seconds N. and long. 86 degrees 59 minutes 47.8 seconds W.

Ap—0 to 6 inches; dark brown (7.5YR 3/2) gravelly silt loam; weak medium granular structure; friable; common fine and medium roots; about 15 percent, by volume, fragments of chert; strongly acid; clear smooth boundary.

Bt1—6 to 28 inches; yellowish red (5YR 5/6) gravelly silty clay loam; weak fine subangular blocky structure; very friable; common fine and medium roots; about 15 percent, by volume, fragments of chert; strongly acid; gradual wavy boundary.

Bt2—28 to 40 inches; yellowish red (5YR 4/6) gravelly silty clay; weak medium subangular blocky structure; friable; common fine roots; common distinct clay films on faces of peds; about 15 percent, by volume, fragments of chert; strongly acid; gradual wavy boundary.

Bt3—40 to 80 inches; yellowish red (5YR 5/6) gravelly clay; moderate medium subangular blocky structure; firm; common fine roots; common distinct clay films on faces of peds; common medium distinct yellowish brown (10YR 5/6) and yellowish red (5YR 5/6) masses of iron accumulation; about 20 percent, by volume, fragments of chert up to 3.0 inches in size; strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Content and size of rock fragments: 15 to 35 percent 0.5- to 4.0-inch fragments of chert in each horizon, except the A horizon, which may have as little as 10 percent
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 6, and chroma of 2 to 4
Texture—gravelly silt loam or gravelly loam

E horizon (where present):
Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture—gravelly silt loam or gravelly loam

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 or 5, and chroma of 6 to 8
Texture—gravelly silt loam, gravelly silty clay loam, or very gravelly silty clay loam to a depth of 40 inches; gravelly silt loam, gravelly silty clay loam, very gravelly silty clay loam, gravelly silty clay, or gravelly clay below 40 inches
Redoximorphic features (where present)—iron or clay depletions in shades of gray and iron accumulations in shades of red or brown in the lower part of the horizon

Gorgas Series

Depth class: Shallow
Drainage class: Well drained
Permeability: Moderately rapid
Parent material: Sandstone residuum

Landscape: Appalachian Plateaus
Landform: Narrow ridges and hillslopes
Landform position: Side slopes
Slope: 35 to 60 percent
Taxonomic class: Loamy, siliceous, subactive, thermic Lithic Hapludults

Commonly Associated Soils

Nauvoo and Sipsey soils are commonly associated with the Gorgas soils.

- The Nauvoo soils are in the smoother positions, are deep, and have a fine-loamy control section.
- The Sipsey soils are in the lower positions on side slopes and are moderately deep to bedrock.

Typical Pedon

Gorgas loamy sand, in an area of Gorgas-Rock outcrop complex, 35 to 60 percent slopes; about 2.0 miles west of Halls Mill; Bibb County, Alabama; SW$^1/_4$ sec. 3, T. 21 S., R. 5 W.; USGS Half Mile Shoals topographic quadrangle; lat. 33 degrees 19 minutes 10.4 seconds N. and long. 87 degrees 3 minutes 17.5 seconds W.

Ap—0 to 5 inches; brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; many fine, medium, and coarse roots; about 5 percent angular gravel; strongly acid; clear wavy boundary.
BE—5 to 9 inches; brown (10YR 5/3) sandy loam; moderate medium granular structure; friable; many fine and medium roots; about 3 percent angular gravel; strongly acid; gradual wavy boundary.
Bt—9 to 17 inches; strong brown (7.5YR 5/6) sandy loam; weak fine subangular blocky structure; friable; common fine, medium, and coarse roots; few faint clay films on faces of peds; very strongly acid; abrupt wavy boundary.
R—17 to 80 inches; hard, massive sandstone.

Range in Characteristics

Thickness of the solum: 10 to 20 inches
Depth to bedrock: 10 to 20 inches to hard bedrock
Content and size of rock fragments: 0 to 35 percent throughout
Reaction: Very strongly acid to slightly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR or 7.5YR, value of 2 to 5, and chroma of 1 to 4
Texture—loamy sand, sandy loam, fine sandy loam, or their gravelly analogs

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 6
Texture—sandy loam, fine sandy loam, loam, or their gravelly analogs

R layer:
Type of bedrock—hard sandstone

Iuka Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate
Parent material: Coarse loamy alluvium
Landscape: Coastal Plain
Landform: Flood plains

Landform position: Convex slopes on high and intermediate parts of natural levees
Slope: 0 to 1 percent
Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Aquic Udifluvents

Commonly Associated Soils

Bibb, Kinston, and Mantachie soils and Fluvaquents are commonly associated with the Iuka soils.

- The poorly drained Bibb and Kinston soils are in the slightly lower, more concave positions on flood plains.
- The Fluvaquents are in depression that are ponded for long periods.
- The somewhat poorly drained, loamy Mantachie soils are in the slightly lower and boarder, concave positions.

Typical Pedon

Iuka fine sandy loam, in an area of Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded; about 5 miles southeast of Centreville; Bibb County, Alabama; SW1/4 sec. 36, T. 23 N., R. 10 E.; USGS Centreville East topographic quadrangle; lat. 32 degrees 55 minutes 52.2 seconds N. and long. 87 degrees 1 minute 58.8 seconds W.

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

C1—3 to 15 inches; yellowish brown (10YR 5/6) sandy loam; massive; very friable; common fine, medium, and coarse roots; common medium distinct brownish yellow (10YR 6/8) masses of iron accumulation; moderately acid; clear smooth boundary.

C2—15 to 26 inches; strong brown (7.5YR 5/6) sandy loam; massive; very friable; common fine, medium, and coarse roots; few fine soft black masses of iron and manganese oxide; common medium distinct brownish yellow (10YR 6/8) masses of iron accumulation; common medium prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear smooth boundary.

C3—26 to 36 inches; brown (7.5YR 4/4) sandy loam; massive; very friable; common fine and medium roots; few fine soft black masses of iron and manganese oxide; few streaks of uncoated sand; common medium distinct strong brown (7.5YR 5/6) masses of iron accumulation; common medium distinct light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear smooth boundary.

Ab—36 to 46 inches; brown (7.5YR 4/4) sandy loam; massive; very friable; few fine and medium roots; few fine soft black masses of iron and manganese oxide; very strongly acid; clear smooth boundary.

Cg1—46 to 55 inches; light brownish gray (10YR 6/2) loam; massive; very friable; strata of loam sand; few fine soft black masses of iron and manganese oxide; common medium prominent yellowish red (5YR 5/8) masses of iron accumulation; very strongly acid; clear smooth boundary.

Cg2—55 to 70 inches; gray (10YR 6/1) loam; massive; friable; strata of uncoated sand; few fine soft black masses of iron and manganese oxide; common medium prominent yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid; clear smooth boundary.

Cg3—70 to 80 inches; gray (10YR 5/1) loam; massive; friable; common thin strata of sand; common medium prominent yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid.

Range in Characteristics

Thickness of the underlying soil material: More than 60 inches
Depth to bedrock: More than 80 inches

Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 7, and chroma of 2 to 4
Texture—fine sandy loam or sandy loam

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture—sandy loam or fine sandy loam; commonly has thin strata of coarser and finer textured material
Redoximorphic features—few to many iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Cg horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—dominantly loam, loamy sand, sandy loam, or fine sandy loam; commonly has thin strata of coarser and finer textured material; sandy clay loam below a depth of 40 inches in some pedons
Redoximorphic features—few to many iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Kinston Series

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderate
Parent material: Stratified loamy and sandy alluvium
Landscape: Coastal Plain
Landform: Flood plains
Landform position: Flat or slightly concave slopes on the lower parts of flood plains
Slope: 0 to 1 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, acid, thermic Fluvaquentic Endoaquepts

Commonly Associated Soils

Bibb, Iuka, and Mantachie soils and Fluvaquents are commonly associated with the Kinston soils.

- The coarse-loamy Bibb soils are in positions similar to those of the Kinston soils on narrow flood plains.
- The Fluvaquents are in depressional positions on flood plains and are ponded for long periods.
- The moderately well drained, coarse-loamy Iuka soils are on high parts of natural levees.
- The somewhat poorly drained Mantachie soils are in the slightly higher positions on flood plains.

Typical Pedon

Kinston loam, in an area of Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded; about 3 miles south of Ashby; Bibb County, Alabama; SW1/4 sec. 19, T. 23 N., R. 12 E.; USGS Randolph topographic quadrangle; lat. 32 degrees 57 minutes 36.1 seconds N. and long. 86 degrees 54 minutes 36.4 seconds W.

A—0 to 10 inches; black (10YR 2/1) loam; weak fine granular structure; friable; many fine, medium, and coarse roots; strongly acid; clear smooth boundary.

Bg1—10 to 17 inches; dark gray (10YR 4/1) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium roots; few fine prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; clear wavy boundary.

Bg2—17 to 25 inches; gray (10YR 5/1) sandy clay loam; weak fine subangular blocky structure; very friable; few fine and medium roots; common fine soft black masses of iron and manganese oxides; common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Bg3—25 to 44 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium soft black masses of iron and manganese oxide; common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Cg1—44 to 60 inches; gray (10YR 7/1) sandy clay loam; massive; friable; many fine soft black masses of iron and manganese oxide; common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Cg2—60 to 80 inches; gray (10YR 7/1) sandy clay loam; massive; friable; thin strata of sandy loam; common fine and medium soft black masses of iron and manganese oxide; common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A horizon:
Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 3
Texture—loam, sandy loam, fine sandy loam, or silt loam

Ag horizon (where present):
Color—hue of 10YR, value of 5, and chroma of 1; or neutral in hue and value of 5
Texture—sandy loam, silt loam, or loam

Bg horizon:
Color—hue of 10YR to 5Y, value of 3 to 7, and chroma of 1 or 2
Texture—loam, sandy clay loam, clay loam, or silty clay loam
Redoximorphic features—iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Cg horizon:
Color—hue of 10YR to 5Y, value of 3 to 7, and chroma of 1 or 2
Texture—sandy clay loam, fine sandy loam, or loam; sandy textures below a depth of 40 inches in some pedons
Redoximorphic features—masses of iron accumulation in shades of brown or yellow

Lucedale Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy, marine sediments
Landscape: Coastal Plain

Landform: Ridges
Landform position: Interfluves and summits
Slope: 0 to 5 percent
Taxonomic class: Fine-loamy, siliceous, subactive, thermic Rhodic Paleudults

Commonly Associated Soils

Bama, Colwell, Savannah, and Smithdale soils are commonly associated with the Lucedale soils.

- The Bama soils are in positions similar to those of the Lucedale soils but do not have a dark red argillic horizon.
- The Colwell soils are also in positions similar to those of the Lucedale soils but have a clayey argillic horizon.
- The moderately well drained Savannah soils are in the slightly lower positions and have a fragipan.
- The Smithdale soils are on slopes adjacent to areas of the Lucedale soils and have a decrease in clay content of 20 percent or more within a depth of 60 inches.

Typical Pedon

Lucedale sandy loam, 2 to 5 percent slopes; 5.3 miles southwest of Brent; Bibb County, Alabama; 2,400 feet north and 1,200 feet east of southwest corner of sec. 13, T. 22 N., R. 8 E.; USGS Centreville West topographic quadrangle; lat. 32 degrees 52 minutes 53 seconds N. and long. 87 degrees 13 minutes 45 seconds W.

Ap—0 to 4 inches; dark reddish brown (5YR 3/4) sandy loam; weak medium subangular blocky structure; friable; many fine and common medium roots; moderately acid; clear smooth boundary.

Bt1—4 to 19 inches; dark red (2.5YR 3/6) sandy clay loam; moderate medium subangular blocky structure; friable; common fine and medium roots; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt2—19 to 42 inches; dark red (2.5YR 3/6) sandy clay loam; moderate medium subangular blocky structure; friable; common fine roots; common distinct clay films on faces of peds; 2 percent rounded quartzite pebbles; very strongly acid; gradual wavy boundary.

Bt3—42 to 60 inches; dark red (2.5YR 3/6) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; common distinct clay films on faces of peds; 5 percent rounded quartzite pebbles; very strongly acid; gradual wavy boundary.

Bt4—60 to 75 inches; dark red (2.5YR 3/6) sandy clay loam; weak medium subangular blocky structure; friable; common distinct clay films on faces of peds; 2 percent rounded quartzite pebbles; common fine prominent light yellowish brown (10YR 6/4) iron depletions that are relict redoximorphic features; very strongly acid; gradual wavy boundary.

BC—75 to 80 inches; dark red (2.5YR 3/6) sandy clay loam; weak coarse subangular blocky structure; friable; few faint clay films on faces of some peds; 2 percent rounded quartzite pebbles; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 5YR or 7.5YR, value of 3, and chroma of 2 to 4
Texture—sandy loam

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 3, and chroma of 4 to 6
Texture—sandy clay loam or clay loam
Mottles (where present)—shades of brown or yellow

BC horizon:
Color—hue of 2.5YR or 5YR, value of 3 or 4, and chroma of 2 to 6
Texture—sandy clay loam or sandy loam

Luverne Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately slow
Parent material: Stratified clayey and loamy, marine sediments
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Convex summits, shoulder slopes, and side slopes
Slope: 2 to 35 percent
Taxonomic class: Fine, mixed, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Colwell, Conecuh, Maubila, and Smithdale soils are commonly associated with the Luverne soils.

- The Colwell soils are on ridges at the slightly higher elevations and have a dark red argillic horizon.
- The moderately well drained Conecuh soils are in positions similar to those of the Luverne soils, commonly at the lower elevations, and have a thick bed of clayey shale at a depth of 60 inches.
- The moderately well drained Maubila soils are also in positions similar to those of the Luverne soils but have a significant content of ironstone fragments in the surface layer.
- The loamy Smithdale soils are in positions similar to those of the Luverne soils and on knolls.

Typical Pedon

Luverne sandy loam in an area of Luverne-Smithdale complex, 5 to 15 percent slopes; 2.0 miles west of Randolph; NW$^1/_4$ sec. 20, T. 23 S., R. 11 E.; USGS Randolph topographic quadrangle; lat. 32 degrees 57 minutes 52.8 seconds N. and long. 86 degrees 59 minutes 36.0 seconds W.

Ap—0 to 3 inches; dark grayish brown (10YR 4/2) sandy loam; weak medium granular structure; very friable; common fine and medium roots; 10 percent rounded quartz pebbles; very strongly acid; clear smooth boundary.
EB—3 to 9 inches; yellowish brown (10YR 5/6) sandy loam; moderate medium granular structure; very friable; common fine roots; 7 percent rounded quartz pebbles; strongly acid; gradual smooth boundary.
Bt1—9 to 16 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure; firm; few fine roots; 5 percent rounded quartz pebbles; common fine clay films on faces of peds; few fine flakes of mica; very strongly acid; gradual wavy boundary.
Bt2—16 to 20 inches; red (2.5YR 4/6) clay; moderate medium subangular blocky structure parting to strong fine subangular blocky; firm; few fine roots; 5 percent

rounded quartz pebbles; few fine clay films on faces of peds; many fine flakes of mica; few prominent distinct brownish yellow (10YR 6/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Bt3—20 to 33 inches; red (2.5YR 4/8) clay loam; strong medium subangular blocky structure parting to moderate medium angular blocky; firm; many fine flakes of mica; 5 percent rounded quartz pebbles; few fragments of shale material; few fine fragments of ironstone; common fine prominent brownish yellow (10YR 6/8) masses of iron accumulation; very strongly acid; gradual wavy boundary.

BC—33 to 48 inches; red (2.5YR 4/8) clay loam; weak medium subangular blocky structure parting to moderate medium angular blocky; firm; many fine flakes of mica; 5 percent rounded quartz pebbles; common fine distinct dark red (2.5YR 3/6) and prominent brownish yellow (10YR 6/8) masses of iron accumulation; few fine prominent white (2.5Y 8/1) relict iron depletions; very strongly acid; gradual wavy boundary.

C1—48 to 62 inches; red (2.5YR 4/6) sandy clay loam; moderate medium platy structure; friable; few thin strata of sandy material; few fine fragments of ironstone; few fine and medium fragments of soft shale; many fine flakes of mica; common medium prominent brownish yellow (10YR 6/8) and common medium faint dark red (2.5YR 3/6) masses of iron accumulation; few fine prominent white (2.5Y 8/1) relic iron depletions; very strongly acid; gradual wavy boundary.

C2—62 to 80 inches; yellowish red (5YR 5/6) sandy clay loam with thin strata of sandy loam; moderate medium platy structure; friable; few fine and medium fragments of soft shale; many fine flakes of mica; common medium distinct dark red (2.5YR 3/6) and common medium prominent brownish yellow (10YR 6/8) masses of iron accumulation; common fine prominent white (2.5Y 8/1) relic iron depletions; very strongly acid.

Range in Characteristics

Thickness of the solum: 30 to 50 inches
Depth to bedrock: More than 60 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 2 to 4
Texture—fine sandy loam or sandy loam

E horizon (where present):
Color—hue of 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—fine sandy loam or sandy loam

EB horizon:
Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8
Texture—clay, clay loam, or sandy clay
Redoximorphic features—few or common relic iron depletions
Mica flakes—few or common

C horizon:
Color—hue of 2.5YR, 5YR, or 7.5YR, value of 4 to 6, and chroma of 5 to 8
Texture—dominantly sandy clay loam; stratified with material from sand to clay
Mica flakes—common or many

Mantachie Series

Depth class: Very deep
Drainage class: Somewhat poorly drained
Permeability: Moderate
Parent material: Loamy alluvium
Landscape: Coastal Plain
Landform: Flood plains
Landform position: Slightly convex slopes at intermediate elevations on flood plains
Slope: 0 to 1 percent
Taxonomic class: Fine-loamy, siliceous, active, acid, thermic Fluventic Endoaquepts

Commonly Associated Soils

Bibb, Iuka, and Kinston soils and Fluvaquents are commonly associated with the Mantachie soils.

- The poorly drained Bibb and Kinston soils are in the slightly lower, more concave positions on flood plains.
- The Fluvaquents are in depressional positions on flood plains and are ponded for long periods.
- The moderately well drained Iuka soils are on the high parts of natural levees.

Typical Pedon

Mantachie fine sandy loam, in an area of Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded; about 0.75 mile north of Bibb Mill; SW1/4 sec. 19, T. 23 N., R. 12 E.; USGS Randolph topographic quadrangle; lat. 32 degrees 57 minutes 32.8 seconds N. and long. 86 degrees 54 minutes 35.7 seconds W.

A1—0 to 5 inches; very dark grayish brown (10YR 3/2) fine sandy loam; weak fine granular structure; friable; many fine, medium, and coarse roots; very strongly acid; clear wavy boundary.

A2—5 to 12 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; friable; many fine, medium, and coarse roots; very strongly acid; clear wavy boundary.

Bg1—12 to 35 inches; light brownish gray (10YR 6/2) sandy clay loam; weak fine subangular blocky structure; friable; common fine and medium roots; few fine soft black masses of iron and manganese oxides; common medium prominent dark yellowish brown (10YR 4/6) masses of iron accumulation; 5 percent, by volume, rounded quartz pebbles; very strongly acid; gradual wavy boundary.

Bg2—35 to 53 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium roots; common fine soft black masses of iron and manganese oxide; few medium prominent yellowish brown (10YR 5/8) masses of iron accumulation; 10 percent, by volume, rounded gravel; very strongly acid; gradual wavy boundary.

Bg3—53 to 65 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; few fine and medium roots; many fine soft black masses of iron and manganese oxide; common medium prominent dark yellowish brown (10YR 4/6), strong brown (7.5YR 4/6), and yellowish red (5YR 4/6) masses of iron accumulation; 5 percent, by volume, rounded quartz pebbles; very strongly acid; gradual wavy boundary.

Bg4—65 to 80 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium roots; common fine soft black masses of iron and manganese oxide; many medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; 5 percent, by volume, rounded quartz pebbles; very strongly acid.

Range in Characteristics

Thickness of the solum: 30 to 80 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4
Texture—fine sandy loam, sandy loam, silt loam, or loam

Bw horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6; or multicolored
Texture—sandy clay loam, loam, or clay loam
Redoximorphic features—iron depletions in shades of gray and masses of iron accumulation in shades of red, brown, or yellow

Bg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam, loam, or clay loam
Redoximorphic features—masses of iron accumulation in shades of brown or yellow

Cg horizon (where present):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—clay loam or sandy clay loam
Redoximorphic features—masses of iron accumulation in shades of brown or yellow

Maubila Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Slow
Parent material: Stratified clayey and loamy, marine sediments
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Convex summits, shoulder slopes, side slopes, and knolls
Slope: 2 to 45 percent
Taxonomic class: Fine, mixed, subactive, thermic Aquic Hapludults

Commonly Associated Soils

Boykin, Luverne, Smithdale, and Wadley soils are commonly associated with the Maubila soils.

- The loamy, well drained Boykin soils are in the slightly lower positions and have an arenic epipedon.
- The well drained Luverne soils are in positions similar to those of the Maubila soils but do not have a significant amount of ironstone fragments in the surface layer.
- The well drained, loamy Smithdale soils are also in positions similar to those of the Maubila soils.
- The loamy, somewhat excessively drained Wadley soils are in the slightly lower positions and have a grossarenic epipedon.

Typical Pedon

Maubila flaggy loam, in an area of Maubila-Smithdale complex, 15 to 35 percent slopes; about 3.8 miles northwest of Pondville; NE$^{1}/_{4}$ sec. 33, T. 23 N., R. 7 E.; USGS Pondville topographic quadrangle; lat. 32 degrees 55 minutes 31 seconds N. and long. 87 degrees 22 minutes 22 seconds W.

Ap—0 to 4 inches; dark yellowish brown (10YR 3/4) flaggy loam; weak medium subangular blocky structure; friable; many fine and medium and few coarse roots; 25 percent, by volume, flagstones and channers; strongly acid; clear smooth boundary.

Bt1—4 to 18 inches; yellowish red (5YR 4/6) clay; moderate medium subangular blocky structure; firm; few fine and medium roots; few distinct clay films on faces of peds; 5 percent, by volume, ironstone channers; few fine flakes of mica; very strongly acid; clear wavy boundary.

Bt2—18 to 27 inches; yellowish red (5YR 4/6) clay; moderate medium subangular blocky structure; firm; few medium roots; common distinct clay films on faces of peds; 5 percent, by volume, ironstone channers; few fine flakes of mica; few medium prominent light brownish gray (10YR 6/2) iron depletions; few medium faint dark red (2.5YR 3/6) and few fine distinct yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; clear wavy boundary.

Bt3—27 to 32 inches; yellowish red (5YR 4/6) sandy clay loam; weak medium subangular blocky structure; firm; 5 percent, by volume, ironstone channers; common medium prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; gradual wavy boundary.

BC—32 to 42 inches; 40 percent yellowish red (5YR 4/6), 30 percent yellowish brown (10YR 5/6), 20 percent light brownish gray (10YR 6/2), and 10 percent red (10R 4/6) silty clay; weak medium platy structure parting to weak medium subangular blocky; friable; few thin strata of coarser textured material; common fine flakes of mica; areas in shades of red and brown are masses of iron accumulation; areas in shades of gray are iron depletions; very strongly acid; gradual wavy boundary.

C—42 to 80 inches; 30 percent dark red (2.5YR 3/6), 30 percent yellowish brown (10YR 5/6), 25 percent light brownish gray (10YR 6/2), and 15 percent yellowish red (5YR 5/6) clay; massive; firm; few thin strata of coarser textured material; common fine flakes of mica; areas in shades of red and brown are masses of iron accumulation; areas in shades of gray are iron depletions; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches

Depth to bedrock: More than 80 inches

Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4

Texture—fine sandy loam, sandy loam, or loam; 5 to 35 percent channers and flagstones in the A horizon

Bt horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 6 to 8; or no dominant matrix color and shades of red, brown, yellow, and gray

Texture—sandy clay, clay loam, or clay

Redoximorphic features—none or common iron depletions in shades of gray or brown in the upper part; common or many iron depletions in shades of gray or brown in the lower part; and common or many masses of iron accumulation in shades of red, brown, or yellow throughout

BC horizon (where present):

Color—no dominant matrix color; multicolored in shades of red, brown, yellow, and gray

Texture—clay, clay loam, or silty clay

Redoximorphic features—iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

C horizon:

Color—no dominant matrix color; multicolored in shades of red, brown, yellow, and gray

Texture—clay, sandy clay loam, or clay loam; or stratified sand through clay; thin discontinuous strata of ironstone in some pedons

Redoximorphic features—iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Minter Series

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Very slow
Parent material: Clayey alluvium
Landscape: Coastal Plain
Landform: Depressions on flood plains and low stream terraces
Landform position: Flat or concave slopes on lower parts of flood plains
Slope: 0 to 1 percent
Taxonomic class: Fine, mixed, semiactive, thermic Typic Endoaqualfs

Commonly Associated Soils

Cahaba, Mantachie, and Riverview soils are commonly associated with the Minter soils.

- The fine-loamy Cahaba soils are in the slightly higher positions on stream terraces.
- The somewhat poorly drained Mantachie soils are in the slightly higher positions on flood plains.
- The well drained Riverview soils are in high positions on flood plains and are fine-loamy.

Typical Pedon

Minter silty clay loam, ponded; about 6 miles south of Brent; Bibb County, Alabama; NW$^1/_4$ sec. 25, T. 22 N., R. 8 E.; USGS Harrisburg topographic quadrangle; lat. 32 degrees 51 minutes 42.7 seconds N. and long. 87 degrees 13 minutes 52.2 seconds W.

A—0 to 5 inches; grayish brown (10YR 5/2) silty clay loam; weak medium subangular blocky structure; friable; common very fine roots; few medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; common iron accumulations along root channels; very strongly acid; clear smooth boundary.

AB—5 to 10 inches; grayish brown (10YR 5/2) silty clay loam; weak medium subangular blocky structure; friable; many fine, medium, and coarse roots; very strongly acid; clear smooth boundary.

Btg1—10 to 18 inches; grayish brown (10YR 5/2) clay loam; weak medium subangular blocky structure; friable; few fine and medium roots; many medium prominent strong brown (7.5YR 5/6) masses of iron accumulation along pores and root channels; very strongly acid; gradual wavy boundary.

Btg2—18 to 30 inches; gray (10YR 5/1) clay; weak coarse prismatic and moderate medium subangular blocky structure; firm; few fine and medium roots; common fine soft black masses of iron and manganese oxides; common medium distinct yellowish red (5YR 5/8) and strong brown (7.5YR 5/8) masses of iron accumulation along root channels; strongly acid; gradual wavy boundary.

Btg3—30 to 41 inches; gray (10YR 5/1) clay; weak coarse prismatic and moderate medium subangular blocky structure; firm; few fine and medium roots; common medium distinct strong brown (7.5YR 5/6) and yellowish red (5YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.

Btg4—41 to 52 inches; gray (10YR 5/1) clay; weak coarse prismatic and moderate medium subangular blocky structure; firm; few fine and medium roots; common fine soft black masses of iron and manganese oxide; common medium distinct reddish yellow (7.5YR 6/8) and yellowish red (5YR 5/8) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btg5—52 to 72 inches; gray (10YR 5/1) clay; weak coarse prismatic and moderate medium subangular blocky structure; firm; common medium distinct reddish yellow (7.5YR 6/8) and strong brown (7.5YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.

Btg6—72 to 80 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; friable; common medium distinct reddish yellow (7.5YR 6/8) and strong brown (7.5YR 5/8) masses of iron accumulation; strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A and AB horizons:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 or less

Btg horizon:
Color—hue of 10YR or 2.5Y; value of 4 or 5 and chroma of 1 or less or value of 6 or 7 and chroma of 2 or less
Texture—sandy clay loam, clay loam, silty clay loam, silty clay, or clay
Redoximorphic features—iron depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Minvale Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Residuum weathered from cherty limestone
Landscape: Appalachian Ridges and Valleys
Landform: Ridges and side slopes
Landform position: Smooth and concave side slopes
Slope: 2 to 50 percent
Taxonomic class: Fine-loamy, siliceous, subactive, thermic Typic Paleudults

Commonly Associated Soils

Bibb, Bodine, Fullerton, and Iuka soils are commonly associated with the Minvale soils.

- The somewhat excessively drained Bodine soils are in the lower positions and have a loamy-skeletal control section.
- The Fullerton soils are in the higher positions on ridgetops and have a clayey subsoil.
- The moderately well drained and poorly drained Iuka and Bibb soils are on flood plains and in drainageways.

Typical Pedon

Minvale gravelly silt loam, 2 to 6 percent slopes; about 4.5 miles northeast of Six Mile; NW1/4 sec. 9, T. 24 N., R. 11 E.; USGS Aldrich topographic quadrangle; lat. 33 degrees 4 minutes 56 seconds N. and long. 86 degrees 59 minutes 3 seconds W.

A—0 to 7 inches; brown (10YR 4/3) gravelly silt loam; moderate medium granular structure; very friable; common fine and medium roots; about 25 percent, by volume, fragments of chert; strongly acid; clear smooth boundary.

E—7 to 13 inches; light yellowish brown (10YR 6/4) gravelly silt loam; weak fine subangular blocky structure; very friable; common fine and medium roots; about 20 percent, by volume, fragments of chert; strongly acid; clear smooth boundary.

BE—13 to 17 inches; light yellowish brown (10YR 6/4) gravelly silt loam; weak medium subangular blocky structure; friable; common fine roots; common distinct clay films on faces of peds; about 20 percent, by volume, fragments of chert; strongly acid; clear smooth boundary.

Bt1—17 to 37 inches; strong brown (7.5YR 5/6) gravelly silty clay loam; moderate medium subangular blocky structure; friable; common fine roots; common distinct clay films on faces of peds; about 20 percent, by volume, fragments of chert ranging up to 3.0 inches in size; strongly acid; clear smooth boundary.

Bt2—37 to 62 inches; red (2.5YR 4/6) very gravelly silty clay loam; moderate medium subangular blocky structure; friable; few faint clay films on faces of peds; common medium distinct brownish yellow (10YR 6/6) masses of iron accumulation; about 45 percent, by volume, fragments of chert ranging up to 3.0 inches in size; strongly acid; clear smooth boundary.

Bt3—62 to 80 inches; yellowish red (5YR 5/8) very gravelly silty clay loam; moderate medium subangular blocky structure; friable; few faint clay films on faces of peds; common medium distinct brownish yellow (10YR 6/6) masses of iron accumulation; about 45 percent, by volume, fragments of chert ranging up to 3.0 inches in size; strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches

Depth to bedrock: More than 60 inches

Rock fragments: 15 to 35 percent 0.5- to 4.0-inch fragments of chert in each horizon, except the A horizon, which may have as little as 10 percent

Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—gravelly silt loam or gravelly loam

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—gravelly silt loam or gravelly loam

Bt horizon:

Color—hue of 5YR to 10YR, value of 4 or 5, and chroma of 6 to 8

Texture—gravelly silt loam, gravelly silty clay loam, or very gravelly silty clay loam to a depth of 40 inches; gravelly silt loam, gravelly silty clay loam, very gravelly silty clay loam, gravelly silty clay, or gravelly clay below 40 inches

Redoximorphic features (where present)—iron or clay depletions in shades of gray and iron accumulations in shades of red or brown in the lower part of the horizon

Montevallo Series

Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Parent material: Residuum weathered from shale
Landscape: Limestone Valleys and Uplands
Landform: Hillslopes
Landform position: Convex to smooth side slopes
Slope: 15 to 35 percent
Taxonomic class: Loamy-skeletal, mixed, subactive, thermic, shallow Typic Dystrudepts

Commonly Associated Soils

Townley soils are commonly associated with the Montevallo soils.

- The Townley soils are in positions similar to those of the Montevallo soils or lower and are moderately deep to bedrock.

Typical Pedon

Montevallo very channery silt loam, in an area of Montevallo-Townley complex, 15 to 35 percent slopes; Bibb County, Alabama; NW$^1/_4$ sec. 29, T. 24 N., R. 4 W.; USGS Aldrich topographic quadrangle; lat. 32 degrees 56 minutes 0.6 second N. and long. 86 degrees 59 minutes 7.2 seconds W.

A—0 to 2 inches; very dark grayish brown (10YR 3/2) very channery silt loam; moderate medium granular structure; very friable; common fine and common medium roots; about 40 percent, by volume, shale channers; very strongly acid; clear wavy boundary.
Bw—2 to 10 inches; dark yellowish brown (10YR 4/4) very channery silt loam; weak medium subangular blocky structure; friable; few fine roots; about 50 percent, by volume, shale channers; extremely acid; clear irregular boundary.
C—10 to 16 inches; yellowish brown (10YR 5/4) extremely channery silt loam; weak medium subangular blocky structure; friable; few fine roots; about 75 percent, by volume, shale channers; extremely acid; abrupt wavy boundary.
Cr—16 to 80 inches; fractured, slightly tilted, weathered shale.

Range in Characteristics

Thickness of the solum: 10 to 20 inches
Depth to bedrock: 10 to 20 inches
Rock fragments: 35 to 50 percent shale fragments 1.0 inch or less in diameter in the solum and up to 70 percent in the substratum
Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—channery silt loam, channery loam, very channery silt loam, or very channery loam

Bw horizon:
Color—hue of 5YR to 2.5Y, value of 4 or 5, and chroma of 4 to 8
Texture—very channery or extremely channery analogs of silt loam, loam, clay loam, or silty clay loam

C horizon :

Color—commonly variegated in shades of red, brown, yellow, and gray from highly weathered shale that has platy relict rock structure

Texture—very channery or extremely channery analogs of silt loam or loam

Cr layer:

Type of bedrock—weathered, level-bedded or slightly tilted shale that can be dug with difficulty with a spade; or tilted beds of shale and thin strata of sand

Myatt Series

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Moderately slow
Parent material: Stratified loamy alluvium
Landscape: Coastal Plain
Landform: Low stream terraces
Landform position: Flat or slightly concave slopes
Slope: 0 to 1 percent
Taxonomic class: Fine-loamy, siliceous, active, thermic Typic Endoaquults

Commonly Associated Soils

Bibb, Cahaba, Columbus, and Mantachie soils are commonly associated with the Myatt soils.

- The Bibb and somewhat poorly drained Mantachie soils are in the lower positions and do not have an argillic horizon.
- The well drained Cahaba soils are on the convex, higher parts of the stream terraces.
- The moderately well drained Columbus soils are in the slightly higher positions.

Typical Pedon

Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded; about 1 mile south of Brent; Bibb County, Alabama; NW$^{1}/_{4}$ sec. 3, T. 22 N., R. 9 E.; USGS Centreville West topographic quadrangle; lat. 33 degrees 55 minutes 12.9. seconds N. and long. 87 degrees 10 minutes 8.7 seconds W.

Ap—0 to 4 inches; grayish brown (10YR 5/2) fine sandy loam; moderate medium granular structure; friable; common very fine, fine, and coarse roots; strongly acid; clear wavy boundary.

Btg1—4 to 16 inches; light gray (10YR 7/1) sandy clay loam; weak medium subangular and angular blocky structure; friable; common fine, medium, and coarse roots; few faint clay films on faces of peds; common fine prominent brownish yellow (10YR 6/8) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2—16 to 28 inches; light gray (10YR 6/1) sandy clay loam; weak coarse prismatic and weak medium subangular blocky and angular blocky structure; friable; common very fine, fine, and medium roots; few silt coats and clean sand grains on vertical faces of peds; few fine soft dark brown (7.5YR 3/2) masses of iron and manganese oxides; common prominent distinct strong brown (7.5YR 5/8) and distinct brown (7.5YR 4/3) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btg3—28 to 36 inches; light brownish gray (2.5Y 6/2) clay loam; weak coarse prismatic and moderate medium subangular blocky structure; friable; common fine and medium roots; common distinct clay films on faces of peds; few silt coats and clean sand grains on vertical faces of peds; common fine and medium soft dark brown (7.5YR 3/2) masses of iron and manganese oxide; common medium prominent brownish yellow (10YR 6/8) and strong brown (7.5YR 5/6) masses of iron accumulation; strongly acid; gradual wavy boundary.

Btg4—36 to 53 inches; light gray (10YR 6/1) loam; weak coarse angular blocky and weak coarse prismatic structure; friable; few silt coats and clean sand grains on vertical faces of peds; pockets of fine sandy loam strata; common fine and medium soft dark brown (7.5YR 3/2) masses of iron and manganese oxide; common medium prominent brownish yellow (10YR 6/6), strong brown (7.5YR 5/6), and yellowish red (5YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Cg—53 to 80 inches; gray (2.5Y 6/1) loam; massive; friable; many fine soft black masses of iron and manganese oxide; common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Extremely acid to strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 1 or 2
Texture—fine sandy loam or silt loam

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 7, and chroma of 1 or 2
Texture—fine sandy loam, loam, sandy clay loam, or clay loam; subhorizons with strata of sandier material in some pedons
Redoximorphic features—masses of iron accumulation in shades of red, brown, or yellow

Cg horizon:
Color—mottled or gleyed
Texture—sandy clay loam, fine sandy loam, or loam; sandy textures below a depth of 40 inches in some pedons

Nauvoo Series

Depth class: Deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Residuum weathered from interbedded sandstone and shale
Landscape: Appalachian Plateaus
Landform: Hillslopes and ridges
Landform position: Smooth or slightly convex side slopes and shoulders
Slope: 2 to 35 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Sipsey, Sunlight, and Townley soils are commonly associated with the Nauvoo soils.

- The Sipsey soils are in positions similar to those of the Nauvoo soils but have bedrock at a depth of 20 to 40 inches.
- The Sunlight soils are in the steeper positions and have bedrock at a depth of less than 20 inches.
- The Townley soils are in the lower positions on footslopes and have a clayey subsoil.

Typical Pedon

Nauvoo sandy loam, 2 to 8 percent slopes; about 5 miles east of West Blocton; Bibb County, Alabama; 1,800 feet south and 2,600 feet east of the northwest corner of sec. 1, T. 24 N., R. 10 E.; USGS West Blocton East topographic quadrangle; lat. 33 degrees 5 minutes 34.9 seconds N. and long. 87 degrees 1 minutes 38.7 seconds W.

Ap—0 to 6 inches; dark yellowish brown (10YR 4/4) sandy loam; weak fine granular structure; friable; many fine, medium, and coarse roots; very strongly acid; clear smooth boundary.

E—6 to 10 inches; brownish yellow (10YR 6/6) sandy loam; moderate medium granular structure; friable; common fine and medium and few coarse roots; very strongly acid; clear wavy boundary.

BE—10 to 13 inches; reddish yellow (7.5YR 6/6) loam; weak medium subangular blocky structure; friable; many fine and common medium and coarse roots; very strongly acid; clear wavy boundary.

Bt1—13 to 29 inches; red (2.5YR 4/6) clay loam; moderate medium subangular blocky structure; friable; common fine and medium roots; common distinct clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt2—29 to 40 inches; red (2.5YR 5/6) clay loam; few fine distinct brownish yellow (10YR 6/6) mottles; moderate medium subangular blocky structure; friable; common fine and medium roots; common distinct clay films on faces of peds; very strongly acid; clear wavy boundary.

BC—40 to 55 inches; 60 percent red (2.5YR 4/6), 20 percent brown (7.5YR 5/4), and 20 percent very pale brown (10YR 7/4) sandy clay loam; weak medium platy rock structure; firm; few fine roots; very strongly acid; clear irregular boundary.

Cr—55 to 80 inches; 70 percent red (2.5YR 4/6), 20 percent brown (7.5YR 5/4), and 10 percent very pale brown (10YR 7/4) weathered sandstone; strong thick and medium platy rock structure; extremely firm; very strongly acid.

Range in Characteristics

Thickness of the solum: 30 to 50 inches

Depth to bedrock: 40 to 60 inches

Content and size of rock fragments: 0 to 10 percent, by volume, in the upper part of the solum and up to 20 percent by in the lower part

Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 or 4

Texture—sandy loam or fine sandy loam

BE horizon (where present):

Color—hue of 5YR or 7.5YR, value of 5, and chroma of 4 to 6

Texture—sandy loam or fine sandy loam

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8

Texture—loam, sandy clay loam, clay loam, or their gravelly analogs

Mottles—none to common in shades of brown or yellowish brown

BC horizon (where present):

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8; or no dominant color and multicolored in shades of brown, yellow, and red

Texture—variable, commonly sandy loam, sandy clay loam, loam, or their gravelly analogs

Mottles—none to many in shades of brown or yellow

Cr layer:
Type of bedrock—weathered sandstone that can be dug with difficulty with a spade, that is level bedded or slightly tilted, or is interbedded with shale

Ochlockonee Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid
Parent material: Loamy and sandy alluvium
Landscape: Coastal Plain and Limestone Valleys and Uplands
Landform: Flood plains
Landform position: Smooth slopes
Slope: 0 to 2 percent
Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents

Commonly Associated Soils

Bibb, Cahaba, Columbus, Minter, and Riverview soils are commonly associated with the Ochlockonee soils.

- The poorly drained Bibb soils are in the lower positions in drainageways.
- The well drained Cahaba and moderately well drained Columbus soils are in the higher positions.
- The poorly drained Minter soils are in depressional areas and in old sloughs.
- The Riverview soils are in the slightly lower positions and have coarser textures than those of the Ochlockonee soils.

Typical Pedon

Ochlockonee loamy sand, in an area of Ochlockonee-Riverview complex, gently undulating, frequently flooded; 1.8 miles southeast of Brent; Bibb County, Alabama; NW$^1/_4$ sec. 2, T. 22 N., R. 9 E.; USGS Centreville West topographic quadrangle; lat. 32 degrees 55 minutes 4.6 seconds N. and long. 87 degrees 8 minutes 50.2 seconds W.

Ap1—0 to 3 inches; brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; common fine and medium roots; strongly acid; clear smooth boundary.
Ap2—3 to 7 inches; dark yellowish brown (10YR 4/4) loamy sand; weak fine granular structure; friable; common fine and medium roots; strongly acid; clear wavy boundary.
C1—7 to 15 inches; dark yellowish brown (10YR 4/4) sandy loam; massive; very friable; common fine and medium roots; very strongly acid; gradual wavy boundary.
C2—15 to 26 inches; yellowish brown (10YR 5/4) loamy sand; massive; very friable; strongly acid; gradual wavy boundary.
C3—26 to 44 inches; yellowish brown (10YR 5/6) stratified loamy sand and sandy loam; massive; very friable; very strongly acid; gradual wavy boundary.
C4—44 to 65 inches; olive yellow (2.5Y 6/6) stratified loamy sand and sandy loam; massive; very friable; common prominent distinct brown (7.5YR 4/3) masses of iron accumulation; very strongly acid; gradual wavy boundary.
C5—65 to 80 inches; pale yellow (2.5Y 7/4) loamy sand; massive; loose; very strongly acid.

Range in Characteristics

Depth to bedrock: More than 60 inches
Reaction: Very strongly acid or strongly acid throughout
Content of mica flakes: None to common throughout the solum

A or Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 4
Texture—silt loam, fine sandy loam, sandy loam, or loamy sand

C horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 8
Texture—fine sandy loam, sandy loam, or loamy sand; strata of finer or coarser textured material in most pedons
Flakes of mica—few or common
Redoximorphic features (where present)—iron accumulations in shades of yellow, brown, or red

Palmerdale Series

Depth class: Deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid
Parent material: Mine spoil areas around coal mining operations
Landscape: Appalachian Plateaus
Landform: Hillslopes and ridges
Landform position: Convex to smooth side slopes
Slope: 6 to 45 percent
Taxonomic class: Loamy-skeletal, mixed, active, acid, thermic Typic Udorthents

Commonly Associated Soils

Brilliant, Montevallo, and Townley soils are commonly associated with the Palmerdale soils.

- The Brilliant soils are in positions similar to those of the Palmerdale soils but are derived from nonacid mine spoil.
- The Montevallo soils are shallow to bedrock.
- The well drained Townley soils are moderately deep to shale and have a clayey subsoil.

Typical Pedon

Palmerdale extremely channery silt loam, in an area of Palmerdale and Brilliant soils, 6 to 45 percent slopes; 0.6 mile south of Hall Mills; Bibb County, Alabama; SW$^1/_4$ sec. 14, T. 21 N., R. 5 W.; USGS Half Mile Shoals topographic quadrangle; lat. 33 degrees 12 minutes 23.5 seconds N. and long. 87 degrees 2 minutes 10.6 seconds W.

A—0 to 4 inches; brown (10YR 5/3) extremely channery silt loam; weak medium granular structure; friable; common fine and common medium roots; about 65 percent fragments, mostly broken shale, sandstone, and coal; very strongly acid; clear wavy boundary.
C—4 to 80 inches; brown (10YR 5/3) extremely channery silt loam; weak medium granular structure; friable; about 85 percent fragments, mostly broken shale, sandstone, and coal; very strongly acid.

Range in Characteristics

Thickness of the solum: Spoil material is thicker than 60 inches.
Depth to bedrock: More than 80 inches
Rock fragments: Shale, sandstone, or coal fragments; 40 to 90 percent
Reaction: Extremely acid to strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 3 to 5, and chroma of 1 to 6
Texture of the fine-earth fraction—sandy loam, loam, or silt loam

C horizon:
Color—hue of 7.5YR to 5Y, value of 4 or 5, and chroma of 2 to 6; commonly variegated in shades of red, brown, yellow, and gray from highly weathered shale that has platy relict rock structure
Texture of the fine-earth fraction—silt loam, loam, or silty clay loam

Riverview Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy alluvium
Landscape: Coastal Plain and Limestone Valleys and Uplands
Landform: Flood plains
Landform position: Smooth slopes
Slope: 0 to 2 percent
Taxonomic class: Fine-loamy, mixed, active, thermic Fluventic Dystrudepts

Commonly Associated Soils

Bibb and Ochlockonee soils are commonly associated with the Riverview soils.

- The Poorly drained Bibb soils are in the lower positions in drainageways.
- The Ochlockonee soils are in the slightly lower positions and have coarser textures than those of the Riverview soils.

Typical Pedon

Riverview sandy loam, in an area of Ochlockonee-Riverview complex, gently undulating, frequently flooded; 0.1 mile west of the Cahaba River; Bibb County, Alabama; SW¹/₄ sec. 29, T. 22 N., R. 9 E.; USGS Harrisburg topographic quadrangle; lat. 32 degrees 51 minutes 24.9 seconds N. and long. 87 degrees 11 minutes 57.7 seconds W.

A1—0 to 3 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; friable; common fine and medium roots; strongly acid; gradual wavy boundary.
A2—3 to 7 inches; brown (7.5YR 5/4) sandy loam; weak fine granular structure; friable; common fine and medium roots; strongly acid; clear wavy boundary.
Bw1—7 to 25 inches; strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular structure; friable; common fine and medium roots; strongly acid; gradual wavy boundary.
Bw2—25 to 30 inches; strong brown (7.5YR 5/8) sandy loam; weak medium subangular structure; friable; common fine roots; strongly acid; gradual wavy boundary.
C1—30 to 51 inches; brownish yellow (10YR 6/6) sandy loam with thin strata of loamy sand; massive; very friable; common medium distinct yellowish brown (10YR 5/8) masses of concentrations in root channels; common flakes of mica; strongly acid; gradual wavy boundary.
C2—51 to 80 inches; brownish yellow (10YR 6/6) fine sandy loam; massive; friable; common medium distinct very pale brown (10YR 7/4) stripping; strongly acid.

Range in Characteristics

Thickness of the solum: 24 to 60 inches
Depth to bedrock: More than 60 inches
Reaction: Very strongly acid to moderately acid throughout

A horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 6
Texture—silt loam, fine sandy loam, sandy loam, or loamy sand

Bw horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 6, and chroma of 3 to 8
Texture—sandy loam, clay loam, sandy clay loam, or loam
Redoximorphic features—iron or clay depletions in shades of gray or brown and iron and/or manganese accumulations in shades of red and black

C horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 4 to 8
Texture—loam, fine sandy loam, sandy loam, or loamy sand; strata of finer or coarser textured material in most pedons
Flakes of mica—few or common
Redoximorphic features (where present)—iron accumulations in shades of yellow, brown, or red

Saffell Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy sediments
Landscape: Coastal Plain
Landform: Hillslopes and narrow ridges
Landform position: Sides slopes
Slope: 5 to 15 percent
Taxonomic class: Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Luverne, Maubila, and Smithdale soils are commonly associated with the Saffell soils.

- The Luverne soils have a clayey argillic horizon and no significant content of gravel.
- The clayey, moderately well drained Maubila soils are in positions similar to those of the Saffell soils but have a significant amount of ironstone fragments in the surface layer.
- The Smithdale soils do not have a significant increase in gravel content within the solum.

Typical Pedon

Saffell gravelly sandy loam, 5 to 15 percent slopes; about 2.3 miles southwest of Oakmulgee; Perry County, Alabama; 2,600 feet north and 300 feet east of the southwest corner of sec. 27, T. 21 N., R. 10 E.; USGS Oakmulgee topographic quadrangle; lat. 32 degrees 46 minutes 29 seconds N. and long. 87 degrees 4 minutes 9 seconds W.

Ap—0 to 5 inches; dark yellowish brown (10YR 4/4) gravelly sandy loam; weak fine granular structure; very friable; many fine and medium roots; about 20 percent fine gravel; strongly acid; clear smooth boundary.
E—5 to 10 inches; yellowish brown (10YR 5/4) gravelly sandy loam; weak fine granular structure; very friable; many fine and medium roots; about 25 percent fine gravel; very strongly acid; clear wavy boundary.
Bt1—10 to 30 inches; yellowish red (5YR 4/6) very gravelly sandy clay loam; moderate fine subangular blocky structure; friable; common fine roots; few faint clay films

on faces of peds; about 50 percent fine and medium gravel; very strongly acid; gradual wavy boundary.

Bt2—30 to 42 inches; yellowish red (5YR 5/8) very gravelly sandy loam; weak fine subangular blocky structure; friable; few fine roots; few faint clay films on faces of peds; about 40 percent fine and medium gravel; very strongly acid; gradual wavy boundary.

C—42 to 80 inches; yellowish red (5YR 5/8) very gravelly sandy loam; massive; friable; about 40 percent fine and medium gravel; few medium distinct strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid.

Range in Characteristics

Thickness of the solum: 35 to 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—gravelly sandy loam or gravelly fine sandy loam; 15 to 35 percent, by volume, fine and medium gravel

E horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 6
Texture—gravelly or very gravelly analogs of fine sandy loam, sandy loam, or loam; 15 to 60 percent, by volume, fine and medium gravel

Bt horizon:
Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 4 to 8
Texture—very gravelly or extremely gravelly analogs of sandy clay loam, sandy loam, or clay loam; 35 to 75 percent, by volume, fine and medium gravel

C horizon:
Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 4 to 8
Texture—gravelly, very gravelly, or extremely gravelly analogs of loamy sand or sandy loam; 20 to 80 percent, by volume, fine and medium gravel
Redoximorphic features (where present)—few or common masses of iron accumulation in shades of brown, yellow, and red

Savannah Series

Depth class: Moderately deep to a root restricting fragipan
Drainage class: Moderately well drained
Permeability: Moderately slow
Parent material: Loamy, fluviomarine sediments
Landscape: Coastal Plain
Landform: High stream terraces and ridges
Landform position: Summits, shoulder slopes, and side slopes
Slope: 0 to 5 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults

Commonly Associated Soils

Bama, Lucedale, and Smithdale soils are commonly associated with the Savannah soils.

- The well drained Bama and Lucedale soils are in positions similar to those of the Savannah soils at the slightly higher elevations but do not have a fragipan and have reddish colors in the argillic horizon.

• The well drained Smithdale soils are on side slopes in areas adjacent to the Savannah soils, do not have a fragipan, and have reddish colors in the argillic horizon.

Typical Pedon

Savannah silt loam, 0 to 2 percent slopes; 3.8 miles southwest of Brent; Bibb County, Alabama; 1,450 feet west and 100 feet south of the northeast corner of sec. 7, T. 22 N., R. 9 E.; USGS Centreville West topographic quadrangle; lat. 32 degrees 54 minutes 25.7 seconds N. and long. 87 degrees 12 minutes 41.1 seconds W.

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

Bt—7 to 20 inches; dark yellowish brown (10YR 4/6) loam; moderate medium subangular blocky structure; friable; common fine and medium roots; few faint clay films on faces of peds; very strongly acid; clear wavy boundary.

Btx1—20 to 27 inches; yellowish brown (10YR 5/6) loam; weak coarse prismatic structure parting to moderate medium subangular blocky; firm; brittle in about 30 percent of the matrix; few fine and medium roots; common faint clay films on faces of peds; about 2 percent fine, rounded quartz pebbles; common thin films of light gray (10YR 7/2) clay depletions consisting of uncoated silt and fine sand on faces of peds; common medium prominent black (10YR 2/1) masses of iron and manganese oxides; common medium distinct light brownish gray (10YR 6/2) iron depletions on faces of peds and within the matrix; common medium distinct strong brown (7.5YR 5/8) masses of iron accumulation on faces of peds and within the matrix; very strongly acid; clear wavy boundary.

Btx2—27 to 43 inches; yellowish brown (10YR 5/6) loam; moderate very coarse prismatic structure parting to moderate medium subangular blocky and angular blocky; very firm; brittle in 80 percent of matrix; many fine and medium vesicular pores; few fine roots in seams between prisms; common distinct clay films on faces of peds; about 2 percent fine, rounded quartz pebbles; common thin films of light gray (10YR 7/2) on vertical faces of prisms; few prominent and medium distinct black (10YR 2/1) masses of iron and manganese oxides; common medium distinct light gray (10YR 7/1) and distinct pale brown (10YR 6/3) iron depletions on faces of peds and within the matrix; common medium faint yellowish red (5YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btx3—43 to 51 inches; yellowish brown (10YR 5/6) loam; moderate very coarse prismatic structure parting to moderate medium subangular blocky; very firm; brittle in 80 percent of the matrix; common fine and medium vesicular pores; few fine roots in seams between prisms; common distinct clay films on faces of peds; about 2 percent fine, rounded quartz pebbles; few thin films of light gray (10YR 7/2) clay depletions consisting of uncoated silt and fine sand on vertical faces of prisms; common medium prominent light gray (10YR 7/1) and distinct pale brown (10YR 6/3) iron depletions on faces of peds and within the matrix; common medium faint brownish yellow (10YR 6/6) masses of iron accumulation within the matrix; very strongly acid; gradual wavy boundary.

Btx4—51 to 70 inches; strong brown (7.5YR 5/6) clay loam; weak very coarse prismatic structure parting to moderate medium subangular blocky; very firm; brittle in 60 percent of the matrix; common distinct clay films on faces of peds; about 2 percent fine, rounded quartz pebbles; few thin films of light gray (10YR 7/2) uncoated silt and fine sand on vertical faces of prisms; common medium distinct light gray (10YR 7/1) and pale brown (10YR 6/3) iron depletions on faces of peds and within the matrix; common medium distinct brownish yellow (10YR 6/6) and few medium prominent red (2.5YR 4/6) masses of iron accumulation within the matrix; very strongly acid; gradual wavy boundary.

Bt′—70 to 80 inches; strong brown (7.5YR 5/8) clay loam; weak very coarse prismatic structure parting to weak medium subangular blocky structure; firm; brittle in about 30 percent of the matrix; few distinct clay films on faces of peds; common medium prominent light gray (10YR 7/1) iron depletions on faces of peds and within the matrix; common medium distinct reddish yellow (7.5YR 6/6) and prominent red (2.5YR 4/6) masses of iron accumulation within the matrix; very strongly acid.

Range in Characteristics

Thickness of the solum: 50 to more than 80 inches
Depth to fragipan: 16 to 38 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly to strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR, value of 4, and chroma of 2 or 3
Texture—silt loam or fine sandy loam

E horizon (where present):
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—fine sandy loam or silt loam

Bt horizon (upper part):
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—loam, clay loam, or sandy clay loam

B/E horizon (where present):
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8
Texture—loam, sandy clay loam, or clay loam; or stratified sandy loam or fine sandy loam

Btx horizon:
Color—hue of 10YR, value of 5, and chroma of 4 to 8; or mottled in shades of red, brown, yellow, and gray
Texture—loam, clay loam, or sandy clay loam
Redoximorphic features—iron or clay depletions in shades of gray or brown and masses of iron accumulation in shades of red, brown, or yellow

Sipsey Series

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Sandstone
Landscape: Appalachian Plateaus
Landform: Ridges, knolls, and shoulders
Landform position: Convex slopes
Slope: 6 to 35 percent
Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Nauvoo, Sunlight, and Townley soils are commonly associated with the Sipsey soils.

- The Nauvoo soils are on the smoother, wider parts of ridges and are very deep to bedrock.
- The Sunlight soils are in the steeper positions and are shallow to bedrock.
- The Townley soils are in the lower positions on toeslopes and are clayey.

Typical Pedon

Sipsey sandy loam, in a area of Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes; about 0.5 mile north of Hebron; Bibb County, Alabama; NW1/4 sec. 24, T. 21 N., R. 5 E.; USGS Half Mile Shoals topographic quadrangle; lat. 33 degrees 10 minutes 18.4 seconds N. and long. 87 degrees 4 minutes 19.4 seconds W.

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

EB—4 to 13 inches; yellowish brown (10YR 5/6) sandy loam; moderate medium and fine granular structure; friable; few fine and medium roots; about 2 percent, by volume, sandstone channers; strongly acid; clear wavy boundary.

Bt1—13 to 19 inches; yellowish red (5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; firm; few fine and medium roots; about 2 percent, by volume, sandstone channers; few brownish yellow (10YR 6/6) and yellowish brown (10YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.

Bt2—19 to 33 inches; yellowish red (5YR 5/6) sandy clay loam; weak medium subangular blocky structure; firm; few fine roots; about 10 percent, by volume, sandstone channers; common distinct clay films on faces of peds; common medium distinct red (2.5YR 4/6) masses of iron accumulation; strongly acid; clear wavy boundary.

Cr—33 to 80 inches; soft, weathered sandstone bedrock; massive.

Range in Characteristics

Thickness of the solum: 20 to 40 inches
Depth to bedrock: 20 to 40 inches; hard bedrock
Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

Ap or A horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture—sandy loam or fine sandy loam

E or EB horizon:
Color—hue of 5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8
Texture—sandy loam, sandy clay loam, or clay loam
Redoximorphic features (where present)—iron depletions in shades of yellow, brown, or gray and iron accumulations in shades of yellow, brown, or red

Cr horizon:
Type of bedrock—level-bedded or cross-bedded, weathered sandstone or interbedded sandstone, siltstone, or shale. It is rippable with heavy equipment and can be cut with hand tools.

Smithdale Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate
Parent material: Loamy, marine deposits
Landscape: Coastal Plain
Landform: Hillslopes and narrow ridges

Landform position: Convex summits, shoulder slopes, sides slopes, and knolls
Slope: 2 to 45 percent
Taxonomic class: Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Commonly Associated Soils

Bama, Boykin, Colwell, Lucedale, Luverne, Maubila, and Wadley soils are commonly associated with the Smithdale soils.

- The Bama soils are on broad ridges at the slightly higher elevations and do not have a significant decrease in clay content with increasing depth.
- The Boykin soils are in positions similar to those of the Smithdale soils but have an arenic sandy epipedon.
- The clayey Colwell and loamy Lucedale soils are on broad ridges at the slightly higher elevations, do not have a significant decrease in clay content with increasing depth, and have a dark red argillic horizon.
- The Luverne soils are in positions similar to those of the Smithdale soils but have a clayey argillic horizon.
- The clayey, moderately well drained Maubila soils are in positions similar to those of the Smithdale soils but have a significant amount of ironstone fragments in the surface layer.
- The somewhat excessively drained Wadley soils are in positions similar to those of the Smithdale soils but have a grossarenic epipedon.

Typical Pedon

Smithdale sandy loam, 2 to 8 percent slopes (fig. 18); about 2.75 miles northwest of Pondville; Bibb County, Alabama; 550 feet east and 750 feet south of northwest corner of sec. 32, T. 23 N., R. 8 E.; USGS Pondville topographic quadrangle; lat. 32 degrees 55 minutes 44.5 seconds N. and long. 87 degrees 17 minutes 53.8 seconds W.

Ap—0 to 6 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; very friable; many fine and medium roots; strongly acid; gradual wavy boundary.

E—6 to 12 inches; yellowish brown (10YR 5/4) sandy loam; weak medium granular structure; very friable; few fine, medium, and coarse roots; very strongly acid; clear smooth boundary.

BE—12 to 18 inches; strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky structure; very friable; few fine and medium and common coarse roots; very strongly acid; clear smooth boundary.

Bt1—18 to 37 inches; red (2.5YR 4/8) sandy clay loam; moderate medium subangular blocky structure; friable; few fine and medium and common coarse roots; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt2—37 to 43 inches; red (2.5YR 4/6) sandy clay loam; weak coarse subangular blocky structure; friable; few faint clay films on faces of peds; very strongly acid; gradual wavy boundary.

Bt3—43 to 60 inches; red (2.5YR 4/6) sandy loam; weak coarse subangular blocky structure; very friable; 12 percent, by volume, ironstone pebbles; very strongly acid; gradual wavy boundary.

Bt4—60 to 71 inches; yellowish red (5YR 5/6) sandy loam; weak coarse subangular blocky structure; very friable; 12 percent, by volume, ironstone pebbles; common fine distinct brownish yellow (10YR 6/6) and common medium distinct strong brown (7.5YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.

BC—71 to 80 inches; strong brown (7.5YR 5/6) sandy loam; weak coarse subangular blocky structure; common medium distinct red (2.5YR 4/6) and light yellowish brown (10YR 6/4) masses of iron accumulation; very strongly acid.

Figure 18.—A profile of a Smithdale soil. Smithdale soils formed in thick deposits of loamy sediments. They are very deep, are loamy, and have a reddish subsoil. They are on hillslopes and summits of narrow ridges.

Range in Characteristics

Thickness of the solum: More than 60 inches
Depth to bedrock: More than 80 inches
Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 4, and chroma of 1 to 3
Texture—sandy loam or fine sandy loam

E horizon (where present):
Color—hue of 10YR, value of 5 or 6, and chroma of 2 to 4
Texture—sandy loam or fine sandy loam

BE horizon (where present):
Color—hue of 10YR to 5YR, value of 4 or 5, and chroma of 4 to 6
Texture—sandy clay loam, sandy loam, or loam

Bt horizon:
Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
Texture—sandy clay loam, clay loam, or loam in the upper part and sandy loam or loam in the lower part
Relic redoximorphic features—few or common masses of iron accumulation in shades of red, brown, or yellow

Sunlight Series

Depth class: Shallow
Drainage class: Well drained
Permeability: Moderate
Parent material: Interbedded shale and sandstone
Landscape: Appalachian Plateaus
Landform: Hillslopes
Landform position: Side slopes
Slope: 15 to 35 percent
Taxonomic class: Loamy-skeletal, mixed, semiactive, thermic, shallow Inceptic Hapludults

Commonly Associated Soils

Montevallo, Nauvoo, Sipsey, and Townley soils are commonly associated with the Sunlight soils.

- The Montevallo soils are in positions similar to those of the Sunlight soils but are shallow to bedrock.
- The Nauvoo soils are in the smoother positions, are deep, and have a fine-loamy control section.
- The Sipsey soils are in the lower positions on side slopes and are moderately deep to bedrock.
- The Townley soils are also in the lower positions on side slopes and are moderately deep to shale bedrock.

Typical Pedon

Sunlight channery sandy loam (fig. 19), in an area of Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes; about 1.0 mile north of Piper; Bibb County, Alabama;

Figure 19.—A profile of a Sunlight soil. Sunlight soils are shallow, loamy-skeletal soils that formed in material that weathered from interbedded shale and sandstone.

SW1/4 sec. 23, T. 22 S., R. 5 W.; USGS West Blocton East topographic quadrangle; lat. 33 degrees 6 minutes 13.9 seconds N. and long. 87 degrees 2 minutes 6 seconds W.

Ap—0 to 3 inches; very dark grayish brown (10YR 3/2) channery sandy loam; weak medium granular structure; very friable; many fine, medium, and coarse roots; 25 percent angular channers of sandstone and shale; strongly acid; clear wavy boundary.

BE—3 to 6 inches; brown (10YR 5/3) channery sandy loam; moderate medium granular structure; friable; many fine and medium roots; 25 percent angular channers of sandstone and shale; very strongly acid; clear wavy boundary.

Bt—6 to 12 inches; reddish yellow (5YR 6/6) extremely channery loam; weak medium subangular blocky structure; friable; common fine and medium and few coarse roots; 70 percent angular channers of sandstone and shale; few faint clay films on faces of peds; very strongly acid; clear irregular boundary.

Cr—12 to 80 inches; fractured, interbedded sandstone and shale.

Range in Characteristics

Thickness of the solum: 10 to 20 inches

Depth to bedrock: 10 to 20 inches

Content and size of rock fragments: 10 to 35 percent in the A and BE horizons and 35 to 90 percent in the Bt horizon

Reaction: Very strongly acid to moderately acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 4

Texture—silt loam, sandy loam, loam, or their gravelly analogs; 10 to 25 percent, by volume, coarse fragments

BE or EB horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 8
Texture—channery silt loam, channery sandy loam, or channery loam; 25 to 35 percent, by volume, coarse fragments

Bt horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—very channery or extremely channery analogs of sandy loam, loam, silty clay loam, or clay loam; 35 to 90 percent, by volume, coarse fragments

Cr layer:
Type of bedrock—weakly consolidated, fractured, interbedded shale and sandstone. Pockets of soil material are present in cracks. The Cr horizon can be ripped with hand tools and light equipment to a depth of 6 feet or more.

Talbott Series

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Moderately slow
Parent material: Clayey residuum weathered from limestone
Landscape: Limestone Valleys and Uplands
Landform: Hillslopes and broad ridges
Landform position: Convex to smooth side slopes
Slope: 6 to 15 percent
Taxonomic class: Fine, mixed, semiactive, thermic Typic Hapludalfs

Commonly Associated Soils

Barfield, Fullerton, and Kinston soils are commonly associated with the Talbott soils.

- The Barfield soils are on the steeper slopes and are shallow to limestone bedrock.
- The Fullerton soils are in positions similar to those of the Talbott soils but are deep to bedrock.
- The Kinston soils are in narrow drainageways on flood plains.

Typical Pedon

Talbott silt loam, 6 to 15 percent slopes, bouldery; about 0.5 mile east of Thomas Mill; Bibb County, Alabama; SE$^{1}/_{4}$ sec. 15, T. 23 N., R. 11 E.; USGS Randolph topographic quadrangle; lat. 32 degrees 58 minutes 18.1 seconds N. and long. 86 degrees 56 minutes 58.5 seconds W.

Ap—0 to 6 inches; brown (10YR 4/3) silt loam; moderate fine granular structure; friable; common fine and medium roots; 5 percent limestone gravel; strongly acid; clear smooth boundary.
E—6 to 12 inches; yellowish brown (10YR 5/4) silty clay loam; weak fine subangular blocky structure; friable; few fine roots; 1 percent limestone gravel; strongly acid; clear smooth boundary.
Bt1—12 to 25 inches; reddish brown (5YR 4/4) silty clay; moderate medium subangular blocky structure; very firm; common fine roots; common faint clay films on faces of peds; common medium prominent yellowish brown (10YR 5/6) iron accumulations and light yellowish brown (10YR 6/4) iron depletions on faces of peds; strongly acid; clear wavy boundary.

Bt2—25 to 30 inches; strong brown (7.5YR 4/6) clay; moderate medium subangular blocky structure; very firm; common fine roots; common faint clay films on faces of peds; common medium prominent light brownish gray (10YR 6/2) and light gray (10YR 7/1) iron depletions on faces of peds and along root channels; 5 percent limestone gravel; moderately acid; abrupt smooth boundary.
R—30 to 80 inches; weathered limestone.

Range in Characteristics

Thickness of the solum: 20 to 40 inches
Depth to bedrock: 20 to 40 inches
Rock fragments: 0 to 10 percent limestone fragments
Reaction: Slightly acid to strongly acid, except the horizon near the bedrock ranges to slightly alkaline

A or Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—silt loam or silty clay loam

E horizon:
Color—hue of 10YR or 7.5YR, value of 4 to 6, and chroma of 2 to 4
Texture—silt loam or silty clay loam

Bt horizon:
Color—hue of 7.5YR to 2.5YR, value of 4 or 5, and chroma of 4 to 8; or no dominant color and shades of red or brown
Texture—silty clay or clay
Redoximorphic features—few or common iron depletions in shades of gray and masses of iron accumulation in shades of red

R layer:
Type of bedrock—limestone

Townley Series

Depth class: Moderately deep
Drainage class: Well drained
Permeability: Slow
Parent material: Clayey residuum weathered from shale or interbedded sandstone and shale
Landscape: Appalachian Plateaus
Landform: Hillslopes and broad ridges
Landform position: Convex to smooth side slopes
Slope: 2 to 35 percent
Taxonomic class: Fine, mixed, semiactive, thermic Typic Hapludults

Commonly Associated Soils

Bibb, Iuka, Montevallo, and Nauvoo soils are commonly associated with the Townley soils.

- The Bibb and Iuka soils are in the lower positions in drainageways and are poorly drained and somewhat poorly drained.
- The Montevallo soils are in the steeper positions and are shallow to bedrock.
- The Nauvoo soils are in the higher positions and have less than 35 percent clay in the subsoil.

Typical Pedon

Townley silt loam, in an area of Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes; about 1.0 mile southwest of Gray Hill; Bibb County, Alabama; SW1/4 sec. 16, T. 21 S., R. 5 W.; USGS Half Mile Shoals topographic quadrangle; lat. 33 degrees 12 minutes 21.4 seconds N. and long. 87 degrees 4 minutes 11.8 seconds W.

A—0 to 5 inches; dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; common fine, medium, and coarse roots; about 5 percent gravel; very strongly acid; clear smooth boundary.

BA—5 to 12 inches; yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; common fine and common medium roots; about 5 percent gravel; very strongly acid; clear smooth boundary.

Bt1—12 to 17 inches; strong brown (7.5YR 5/6) silty clay; moderate medium subangular blocky structure; firm; few fine roots; about 2 percent gravel; very strongly acid; clear smooth boundary.

Bt2—17 to 25 inches; strong brown (7.5YR 5/8) silty clay; moderate medium subangular blocky structure; very firm; few fine roots; about 10 percent light gray (10YR 7/1) fragments of shale; common faint clay films on faces of peds; common medium prominent yellowish red (5YR 5/8) masses of iron accumulation; very strongly acid; clear wavy boundary.

BC—25 to 35 inches; strong brown (7.5YR 5/6) and red (2.5YR 4/6) silty clay loam; moderate thin platy structure parting to weak fine subangular blocky; friable; few very fine roots; 30 percent shale fragments; extremely acid; abrupt wavy boundary.

Cr—35 to 80 inches; weathered, level-bedded shale.

Range in Characteristics

Thickness of the solum: 20 to 40 inches

Depth to bedrock: 20 to 40 inches

Rock fragments: 5 to 15 percent shale fragments 1.0 inch or less in diameter in the solum and up to 50 percent in the substratum

Reaction: Extremely acid to strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—fine sandy loam, silt loam, or loam

BA horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6

Texture—loam, silt loam, or silty clay loam

Bt horizon:

Color—hue of 5YR or 7.5YR, value of 4 or 5, and chroma of 6 to 8; or no dominant color and shades of red or brown

Texture—silty clay or clay

Redoximorphic features—few or common relict iron depletions in shades of gray and masses of iron accumulation in shades of red

BC horizon:

Color—hue of 7.5YR to 2.5Y, value of 5, and chroma of 6 to 8; or, commonly, no dominant color and variegated throughout with mottles in shades of gray, brown, yellow, and red

Texture—silty clay loam, silty clay, or clay

Redoximorphic features—few to many iron or clay depletions in shades of gray and masses of iron accumulation in shades of red

Cr layer:

Type of bedrock—weathered, level-bedded or slightly tilted shale or interbedded shale and sandstone that can be dug with difficulty with a spade; or tilted beds of shale

Wadley Series

Depth class: Very deep
Drainage class: Somewhat excessively drained
Permeability: Rapid in the surface and subsurface layers; moderate in the subsoil
Parent material: Sandy and loamy marine deposits
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Summits, shoulder slopes, side slopes, and footslopes
Slope: 5 to 35 percent
Taxonomic class: Loamy, siliceous, subactive, thermic Grossarenic Paleudults

Commonly Associated Soils

Boykin, Maubila, and Smithdale soils are commonly associated with the Wadley soils.

- The well drained Boykin soils are in positions similar to those of the Wadley soils but have a sandy epipedon that is 20 to 40 inches thick.
- The clayey, moderately well drained Maubila soils are also in positions similar to those of the Wadley soils.
- The well drained Smithdale soils are in the slightly higher positions and do not have a thick, sandy epipedon.

Typical Pedon

Wadley loamy sand, in an area of Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes; about 4.5 miles southeast of Pondville; SE$^{1}/_{4}$ sec. 13, T. 23 N., R. 7 E.; USGS Pondville topographic quadrangle; lat. 32 degrees 58 minutes 2.5 seconds N. and long. 87 degrees 19 minutes 22.5 seconds W.

A1—0 to 2 inches; very dark grayish brown (10YR 3/2) loamy sand; single grained; loose; many coarse, medium, and fine roots; strongly acid; clear wavy boundary.
A2—2 to 10 inches; dark grayish brown (10YR 4/2) loamy sand; single grained; loose; many coarse, medium, and fine roots; strongly acid; clear wavy boundary.
E1—10 to 14 inches; yellowish brown (10YR 5/4) loamy sand; single grained; loose; common coarse and medium roots; few black organic stains; 3 percent medium quartz gravel; very strongly acid; gradual wavy boundary.
E2—14 to 26 inches; light yellowish brown (10YR 6/4) loamy sand; single grained; loose; 3 percent medium quartz gravel; very strongly acid; gradual wavy boundary.
E3—26 to 44 inches; brownish yellow (10YR 6/6) loamy sand; single grained; loose; 2 percent, by volume, ironstone pebbles; common medium distinct very pale brown (10YR 7/4) mottles; strongly acid; gradual wavy boundary.
B/E—44 to 68 inches; 80 percent strong brown (7.5YR 5/6) sandy loam (B); weak medium subangular blocky structure; very friable; 20 percent brownish yellow (10YR 6/6) loamy sand (E); single grained; loose; strongly acid; gradual wavy boundary.
Bt—68 to 80 inches; reddish yellow (7.5YR 6/6) sandy loam; weak medium subangular blocky structure; very friable; common medium distinct light yellowish brown (10YR 6/4) mottles; strongly acid.

Range in Characteristics

Thickness of the solum: More than 80 inches
Depth to bedrock: More than 80 inches

Reaction: Very strongly acid or strongly acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:
Color—hue of 10YR, value of 3 to 6, and chroma of 2 to 4
Texture—loamy fine sand, loamy sand, or sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 6
Texture—loamy fine sand, loamy sand, or sand

B part of the B/E horizon:
Color—discontinuous horizontal lamellae with hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 4 to 8
Texture—coated sand to loamy fine sand

E part of the B/E horizon:
Color—hue of 10YR, value of 5 to 8, and chroma of 2 to 6
Texture—sand or fine sand

Bt horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—few or common masses of iron accumulation in shades of red, brown, or yellow

Wilcox Series

Depth class: Deep
Drainage class: Somewhat poorly drained
Permeability: Very slow
Parent material: Acid, clayey, marine sediments and underlying shale
Landscape: Coastal Plain
Landform: Hillslopes and ridges
Landform position: Convex summits, shoulder slopes, and side slopes
Slope: 2 to 15 percent
Taxonomic class: Very-fine, smectitic, thermic Chromic Dystruderts

Commonly Associated Soils

Boswell, Luverne, and Smithdale soils are commonly associated with the Wilcox soils.

- The moderately well drained Boswell soils are in positions similar to those of the Wilcox soils but are very deep.
- The well drained Luverne soils are also in positions similar to those of the Wilcox soils, are very deep to bedrock, and have mixed mineralogy.
- The loamy, well drained Smithdale soils are in the slightly higher positions and on knolls.

Typical Pedon

Wilcox clay loam, in an area of Wilcox-Boswell complex, 5 to 15 percent slopes, eroded; Bibb County, Alabama; about 6 miles west of Randolph; NW$^{1}/_{4}$ sec. 8, T. 22 N., R. 11 E.; USGS Randolph topographic quadrangle; lat. 32 degrees 54 minutes 25.0 seconds N. and long. 87 degrees 59 minutes 56.8 seconds W.

Ap—0 to 4 inches; brown (7.5YR 4/3) clay loam; moderate medium subangular blocky structure; firm; many very fine and fine and few medium roots; strongly acid; clear wavy boundary.

Bt—4 to 9 inches; yellowish red (5YR 4/6) clay; strong medium subangular blocky structure; firm; common very fine and few fine and medium roots; many pressure faces; few faint clay films on faces of peds; very strongly acid; clear wavy boundary.

Btss1—9 to 18 inches; yellowish red (5YR 5/6) clay; strong medium subangular blocky structure; very firm; few fine and medium roots; many pressure faces; few faint clay films on faces of peds; few intersecting slickensides that have faint, slightly grooved surfaces; many medium prominent light brownish gray (10YR 6/2) and common medium prominent pale brown (10YR 6/3) iron depletions; very strongly acid; clear wavy boundary.

Btss2—18 to 35 inches; 40 percent red (2.5YR 4/6), 40 percent gray (2.5Y 6/1), and 20 percent light yellowish brown (10YR 6/4) clay; strong medium subangular blocky structure; firm; few fine and medium roots; few faint clay films on faces of peds; few intersecting slickensides that have faint, slightly grooved surfaces; areas of red and brown are masses of iron accumulation; areas of gray are iron depletions; very strongly acid; gradual wavy boundary.

B/C—35 to 46 inches; light brownish gray (10YR 6/2) clay; strong medium subangular blocky structure; firm; few fine and medium roots; few faint clay films on faces of peds; few fine fragments of ironstone; many coarse prominent red (10R 4/6) and few medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Cr1—46 to 58 inches; grayish brown (2.5Y 5/2) shale; strong thick platy rock structure; very firm; many medium distinct light olive brown (2.5Y 5/4) and prominent olive yellow (2.5Y 6/6) masses of iron accumulation on faces of peds; very strongly acid; abrupt smooth boundary.

Cr2—58 to 80 inches; grayish brown (2.5Y 5/2) shale; strong thick platy rock structure; very firm; many medium distinct light olive brown (2.5Y 5/4) and olive yellow (2.5Y 6/6) masses of iron accumulation on faces of peds; extremely acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches

Depth to bedrock: 40 to 60 inches

Reaction: Strongly acid to extremely acid throughout the profile, except for the surface layer in areas where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—clay or clay loam

Bt and Btss horizons:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8; no dominant matrix color and multicolored in shades of red, brown, and gray

Texture—clay

Redoximorphic features—few to many depletions in shades of gray and few to many accumulations in shades of brown, red, and yellow

Cr horizon:

The Cr horizon is shale or clayey shale. It has platy or rock structure and is restrictive to root growth. It can be cut with hand tools and is rippable by light machinery.

Formation of the Soils

In this section, the factors of soil formation are related to the soils in Bibb County and the processes of horizon differentiation are explained.

Factors of Soil Formation

Soil is a natural, three-dimensional body on the earth's surface that supports plants. Soil forms through weathering and other processes that act on deposited or accumulated geologic material. The kind of soil that forms depends on the type of parent material; the climate under which soil material has existed since accumulation; the relief, or lay of the land; the plant and animal life in and on the soil; and the length of time that the forces of soil formation have acted on the soil material. The relative importance of each of these factors differs from place to place; in some areas, one factor is more important, and in other areas another may dominate. A modification or variation in any of the facto4rs results in a different kind of soil.

Climate and living organisms are the active factors of soil formation. They act on parent material and change it into a natural body that has definite characteristics. The effects of climate and living organisms are conditioned by relief, which influences surface drainage; the amount of water that percolates through the soil; the rate of erosion; and the kind of vegetation that grows on the soil. The nature of the parent material also affects the kind of soil profile that is formed. Time is needed for the parent material to change into a soil. The development of a distinct soil horizon normally requires a long period of time.

Parent Material

Parent material is the initial physical body that is changed by the other soil-forming factors over time. Generally, the younger the soil, the greater the influence of the parent material on soil properties. The nature of the parent material can be expressed in many ways in the soil profile, including color, texture, and mineralogy. These properties can be related to physical and chemical properties, such as susceptibility to erosion, shrink-swell potential, and cation-exchange capacity.

The soils in Bibb County formed mainly in four kinds of parent material: material weathered from limestone; material weathered from sandstone or interbedded sandstone and shale; sandy, loamy, and clayey marine sediments that have undergone considerable weathering in place; and water-deposited material on stream terraces and flood plains.

The Knox Group and the Devonian and Silurian Systems are formations in the northwestern and east-central parts of the county. They are weathered from limestone and dolomite. Soils that formed in material weathered from these rocks include Barfield, Bodine, Fullerton, and Minvale soils.

The Pottsville Formation is in the northeastern part of the county. It is made up of sandstone or interbedded sandstone and shale (fig. 20). Soils that formed in material weathered from these rocks include Brilliant, Gorgas, Montevallo, Nauvoo, Palmerdale, Sipsey, Sunlight, and Townley soils.

Figure 20.—A vertical exposure of interbedded sandstone and shale. Soils that formed in residuum that weathered from such rock include Nauvoo, Sipsey, and Sunlight soils.

Marine sediments of the Tuscaloosa Group, undifferentiated, are located in the southern and northwestern parts of the county. They consist of varicolored sandy, loamy, and clayey soils that formed from marine sediments. Some soils may have local thin beds of indurated ironstone. Soils that formed in material weathered from these sediments include Boswell, Boykin, Colwell, Conecuh, Luverne, Maubila, Smithdale, Wadley, and Wilcox soils.

Alluvial deposits of recent age and low terrace deposits of Holocene age are along the Cahaba River and major creeks and streams throughout the county. Annemaine, Bama, Cahaba, Lucedale, Minter, and Savannah soils formed in water-deposited material on stream terraces. Bibb, Choccolocco, Columbus, Iuka, Mantachie, Minter, Kinston, Ochlockonee, and Riverview soils formed in the water-deposited material on flood plains.

Climate

The climate of Bibb County is warm and humid. Summers are long and hot. Winters are short and mild, and the ground rarely freezes to a depth of more than a few inches. The climate is fairly even throughout the county and accounts for few differences between the soils. Rainfall averages about 59 inches a year. Detailed information about the climate in the county is given in the section “General Nature of the County” and in tables 1, 2, and 3.

The mild, humid climate favors rapid decomposition of organic matter and hastens chemical reactions in the soil. The plentiful rainfall leaches large amounts of soluble bases and carries the less soluble fine particles downward, resulting in acid soils that have a sandy surface layer and that are low in natural fertility. The large amount of moisture and the warm temperatures favor the growth of bacteria and fungi and speed the decomposition of organic matter, resulting in soils that have a low content of organic matter.

Relief

In Bibb County, the topography ranges from nearly level to very steep. Elevations range from about 175 to 700 feet above sea level. Large, low-lying flat areas and depressions are generally somewhat poorly drained or poorly drained and accumulate water. The water, which is received mainly as runoff from adjacent areas, slows soil formation. As slope increases, the hazard of erosion becomes greater and runoff increases but less water soaks into the soil and leaching decreases. In places, erosion nearly keeps pace with soil formation; therefore, soils on steep slopes are generally thin and weakly developed.

The aspect of slope affects the microclimate. Soils that have slopes facing the south or southwest warm up somewhat earlier in spring and generally reach a higher temperature each day than those facing north. As result, soils that have south- or southwest-facing slopes have accelerated chemical weathering. Soils that have north-facing slopes retain moisture longer because they are shaded for longer periods and have lower temperatures. In Bibb County, differences caused by direction of slope are slight and only of minor importance to soil formation.

Relief varies significantly in Bibb County and generally can be related to the physiographic regions and geologic units in the county. It ranges from very low on the flood plains and stream terraces to very high in the dissected hills.

Relief influences the formation of soil through its effect on drainage, runoff, and erosion. Soil properties that are influenced by relief include the thickness of the solum, the thickness of the A horizon, the color of the profile, the degree of horizon differentiation, and the relative wetness of the profile. The thickness of the solum is one of the properties most obviously related to relief. Soils on nearly level summits tend to have a thicker solum than that of soils on steep side slopes.

Relief also affects moisture relationships in soil. It affects the depth to ground water and the amount of water that is available for plant growth. Generally, the water table is closer to the surface in depressions than on the high parts of the landscape.

Plants and Animals

Living organisms greatly influence the processes of soil formation and the characteristics of the soils. Trees, grasses, insects, earthworms, rodents, fungi, bacteria, and other forms of plant and animal life are affected by the other soil-forming factors. Animal activity is largely confined to the surface layer of the soil. The soil is continually mixed by this activity, which improves water infiltration. Plant roots create channels through which air and water move more rapidly, thereby improving soil structure and increasing the rate of chemical reactions in the soil.

Microorganisms help to decompose organic matter, which releases plant nutrients and chemicals into the soil. These nutrients are either used by the plants or are leached from the soil. Human activities that influence plant and animal populations in the soil affect the rate of soil formation.

The native vegetation in Bibb County consisted dominantly of loblolly-shortleaf pine and oak-pine forest types in the uplands and oak-hickory and oak-gum forest types in the bottom lands. The understory species consisted of numerous species, including holly, panicums, bluestems, American beautyberry, Indiangrass, longleaf uniola, and flowering dogwood. These species represent only a very limited number of the wide variety of plants native to the county but can be used as a guide to plants presently in the county. The plant communities in the county are also reflected in the distribution of species of fauna. Animals, in turn, have an impact on the soil properties of a particular area. For example, ants, worms, moles, armadillo, and gophers can improve aeration in a compacted soil. Microbes that thrive in a particular plant community react to various soil conditions and consequently influence the soil profile by providing decayed organic matter and nitrogen to the soil matrix.

Time

If all other factors of soil formation are equal, the degree of soil formation is in direct proportion to time. If soil-forming factors have been active for a long time, horizon development is stronger than if these same factors have been active for a relatively short time. Some parent materials are more easily weathered than others. The rate of weathering is dependent on the mineral composition and degree of consolidation of the parent material. “Time zero” for soil formation is considered to be that point in time when fresh parent material is first exposed to the other soil forming factors. Commonly, this is a catastrophic occurrence, such as a flood, a change in topography resulting from a geologic event, a severe episode of erosion, or the influence of humans on the landscape.

Geologically, the soils in Bibb County are commonly old. The youngest soils are the alluvial soils on active flood plains along streams and rivers. These soils receive deposits of sediment and are undergoing a cumulative soil-forming process. In most cases, these young soils have weakly defined horizons, mainly because the soil-forming processes have been active for only a short time. Bibb, Iuka, Kinston, and Ochlockonee soils are examples of young soils.

Soils on terraces along the Cahaba River and other major streams are older than soils on flood plains but are still relatively young. Although they formed in material deposited by the river, these soils are no longer reached by frequent overflows because the river channel is now deeper. Many of these soils have relatively strong horizon development. Annemaine, Cahaba, and Columbus soils are examples of soils on stream terraces having varying age and elevation.

Soils on uplands are generally older than soils on terraces or flood plains and range in age from old to very old. The degree of soil development depends on landscape position and composition of the parent material. Minvale, Nauvoo, Smithdale, and Sipsey soils are examples of soils on uplands.

Processes of Horizon Differentiation

The main processes involved in the formation of soil horizons are accumulation of organic matter, leaching of calcium carbonate and other bases, reduction and transfer of iron, and formation and translocation of silicate clay minerals. These processes can occur in combination or individually, depending on the integration of the factors of soil formation.

Most soils have four main horizons. The A horizon is the surface layer. It is the horizon of maximum accumulation of organic matter. It commonly is darker than horizons below it because of the influence of the organic matter. Organic matter has accumulated to form an A horizon in all of the soils in the county. The content of organic matter varies between soils because of differences in relief, wetness, and natural fertility. The E horizon, usually called the subsurface layer, occurs in many of the soils in the county, especially those soils on uplands. It is the horizon of maximum loss of soluble or suspended material. It commonly is lighter in color and coarser in texture than the overlying and underlying horizons. Boykin and Wadley soils have both an A horizon and an E horizon. Other soils have an A horizon but do not have an E horizon. Examples are Bibb, Mantachie, and Kinston soils.

The B horizon, usually called the subsoil, is directly below the A or E horizon. It is the horizon of maximum accumulation of dissolved or suspended material, such as iron or clay. Soils on old, stable landforms generally have a thick, well structured B horizon. Examples are Colwell, Nauvoo, and Luverne soils. Soils on flood plains either do not have a B horizon or have a weakly developed B horizon. Examples are Ochlockonee, Iuka, Kinston, and Riverview soils.

The C horizon is the substratum. It has been affected very little by the soil forming processes but is typically somewhat modified by weathering.

The chemical reduction and transfer of iron, called gleying, is evident in the wet soils in the county. Gleying results in gray colors in the subsoil and gray mottles in other horizons. The gray colors indicate the reduction and loss of iron and manganese. The horizons of some soils, such as Columbus and Annemaine soils, have reddish and brownish redoximorphic features, which indicate a segregation of iron.

Leaching of carbonates and bases has occurred in most of the soils in the county. This process contributes to the development of distinct horizons and to the naturally low fertility and acid reaction of most soils of the Appalachian Plateau, Limestone Valley and Uplands, and Coastal Plain.

Soils that formed under good drainage conditions have a subsoil that is uniformly bright in color. Bama, Nauvoo, and Smithdale and soils are examples. Soils that formed under poor drainage conditions have grayish colors. Bibb and Kinston soils are examples. Soils that formed where drainage is intermediate have a subsoil that is mottled in shades of gray, red, and brown. Annemaine, Columbus, and Savannah soils are examples. The grayish colors persist even if artificial drainage is provided. The dark grayish brown colors in the upper part of the Kinston soils are assumed to be inherited from the parent material.

In steep areas, the surface soil erodes. In low areas and in depressions, soil materials commonly accumulate and add to the thickness of the surface layer. In some areas, the rate of formation of soil materials and the rate of removal of soil materials are in equilibrium. The eluviation of clay from E horizon to the Bt horizon is also related to the degree of relief.

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. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., P.M. Whited, and R.F. Pringle, editors. Version 5.0, 2004. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson, editors. 2002. Field book for describing and sampling soils. Version 2.0. U.S. Department of Agriculture, Natural Resources Conservation Service.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

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

Tharp, W.E., and W.L. Lett. 1908. Soil Survey of Bibb County, Alabama. U.S. Department of Agriculture, Bureau of Soils, and Alabama Department of Agriculture and Industries.

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. (Available in the State office of the Natural Resources Conservation Service at Auburn, Alabama, or online at http://soils.usda.gov/)

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov/technical/)

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. 2001. 2000 Census of population and housing. Summary of population and housing characteristics in Alabama.

Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha,alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

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.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

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 (geomorphology). 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 plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

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

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

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.

Cable yarding. A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

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

Colluvium. Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

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

Concretions. See Redoximorphic features.

Conglomerate. A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

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

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

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

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.

Coprogenous earth (sedimentary peat). A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). 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.

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.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

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.

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

Delta. A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

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

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Dune. A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

Earthy fill. See Mine spoil.

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.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

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.

Erosion pavement. A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

Erosion surface. A land surface shaped by the action of erosion, especially by running water.

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. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan remnant. A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away;

the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

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

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay. A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Foothills. A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

Footslope. The concave surface at the base of a hillslope. 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.

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.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. 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 reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

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

Hill. A generic term for an elevated area 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. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

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.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The

B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

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

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

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

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

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

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

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

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

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

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Knoll. A small, low, rounded hill rising above adjacent landforms.

$K_{sat.}$ Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

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 (33 kPa or 10 kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

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

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

Loess. Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Meander belt. The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

Meander scar. A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

Meander scroll. One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

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.

Mesa. A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

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. A kind of map unit that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

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. See Redoximorphic features.

Nose slope (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

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

Paleoterrace. An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual.” In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

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

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

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

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

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

Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

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.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as 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. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:

   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*

   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*

   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.

2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:

   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*

   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).

3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.
Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.
Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.
Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.
Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.
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.
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.
Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
Sandstone. Sedimentary rock containing dominantly sand-sized particles.
Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
Saturated hydraulic conductivity (K_{sat}). See Permeability.
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.
Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.
Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.
Series, soil. A group of soils that have profiles that are almost alike. All the soils of a given series have horizons that are similar in composition, thickness, and arrangement.
Shale. Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.
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 convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.
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 (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

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

Slickensides (pedogenic). Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

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	0 to 2 percent
Very gently sloping	1 to 3 percent
Gently sloping	2 to 5 percent
Moderately sloping	5 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 35 percent
Very steep	35 percent and higher

Classes for complex slopes are as follows:

Level	0 to 2 percent
Nearly level	0 to 2 percent
Gently undulating	0 to 3 percent
Gently rolling	5 to 15 percent
Hilly	15 to 35 percent
Steep	35 to 45 percent
Very steep	45 percent and higher

Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^+ to Ca^{++} + Mg^{++}. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

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 and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

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.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

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

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace (conservation). 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 (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

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.

Till. Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Till plain. An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

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

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Tables

Table 1.—Temperature and Precipitation

[Recorded in the period 1971–2000 at Centreville, Alabama]

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have—		Average number of growing degree days*	Average	2 years in 10 will have—		Average number of days with 0.10 inch	Average snowfall
				Maximum temp. higher than—	Minimum temp. lower than—			Less than—	More than—		
	°F	*°F*	*°F*	*°F*	*°F*	*Units*	*In*	*In*	*In*		*In*
January	53.8	32.3	43.0	75	7	46	6.05	3.66	8.49	7	0.6
February	59.6	36.2	47.9	80	14	93	5.47	2.95	7.73	6	0.0
March	67.6	42.5	55.1	85	22	212	6.95	3.83	9.27	7	0.5
April	75.0	49.0	62.0	88	31	363	5.13	2.14	8.10	6	0.1
May	81.5	58.2	69.9	92	42	615	4.29	1.96	6.45	6	.0
June	87.9	65.7	76.8	97	52	802	4.49	2.01	6.83	6	.0
July	91.0	69.3	80.1	100	62	932	5.05	2.47	7.52	7	.0
August	90.1	68.5	79.3	99	59	907	4.11	2.06	6.04	5	.0
September	84.9	62.3	73.6	97	44	707	3.99	1.94	5.76	5	.0
October	75.4	50.3	62.9	89	32	403	3.36	0.89	5.88	4	.0
November	65.8	42.1	53.9	82	23	180	4.97	2.57	7.20	6	.0
December	56.9	35.0	46.0	77	12	77	4.75	3.25	6.31	7	.0
Yearly:											
Average	74.1	51.0	62.5	—	—	—	—	—	—	—	—
Extreme	105	-6	—	101	5	—	—	—	—	—	—
Total	—	—	—	—	—	5,337	58.60	48.01	67.40	72	1.3

* 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 termperature below which growth is minimal for the principal crops in the area (50 degrees F).

Table 2.—Freeze Dates in Spring and Fall

[Recorded in the period 1971–2000 at Centreville, Alabama]

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 4	March 23	April 12
2 years in 10 later than—	February 27	March 16	April 5
5 years in 10 later than—	February 14	March 3	March 24
First freezing temperature in fall:			
1 year in 10 earlier than—	November 16	November 4	October 22
2 years in 10 earlier than—	November 26	November 9	October 28
5 years in 10 earlier than—	December 14	November 19	November 8

Table 3.—Growing Season

[Recorded in the period 1971–2000 at Centreville, Alabama]

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	*Days*	*Days*
9 years in 10	265	235	201
8 years in 10	277	243	210
5 years in 10	302	259	229
2 years in 10	326	275	248
1 year in 10	339	284	258

Table 4.—Acreage and Proportionate Extent of the Soils

Map symbol	Map unit name	Acres	Percent
AnA	Annemaine silt loam, 0 to 2 percent slopes, rarely flooded	1,260	0.3
AnB	Annemaine silt loam, 2 to 5 percent slopes, rarely flooded	20	*
BaA	Bama fine sandy loam, 0 to 2 percent slopes	370	*
BaB	Bama fine sandy loam, 2 to 5 percent slopes	8,040	2.0
BdA	Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded	23,160	5.8
BoD	Bodine very gravelly silt loam, 6 to 15 percent slopes, stony	5,060	1.3
BvF	Bodine-Minvale complex, 15 to 35 percent slopes, stony	12,305	3.1
BvG	Bodine-Minvale complex, 35 to 50 percent slopes, stony	825	0.2
CaA	Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded	2,675	0.7
CaB	Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded	2,135	0.5
CcA	Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded	450	0.1
CmA	Columbus loam, 0 to 2 percent slopes, occasionally flooded	9,175	2.3
CoA	Colwell sandy loam, 0 to 2 percent slopes	105	*
CoB	Colwell sandy loam, 2 to 5 percent slopes	3,205	0.8
CuB	Conecuh sandy loam, 2 to 5 percent slopes	1,535	0.4
CvD2	Conecuh-Luverne complex, 5 to 15 percent slopes, eroded	6,015	1.5
FaA	Fluvaquents, ponded	1,245	0.3
FuD	Fullerton gravelly silt loam, 6 to 15 percent slopes	625	0.2
GrG	Gorgas-Rock outcrop complex, 35 to 60 percent slopes	3,940	1.0
LdA	Lucedale sandy loam, 0 to 2 percent slopes	390	*
LdB	Lucedale sandy loam, 2 to 5 percent slopes	1,150	0.3
LnB	Luverne sandy loam, 2 to 5 percent slopes	3,425	0.9
LsD	Luverne-Smithdale complex, 5 to 15 percent slopes	46,385	11.6
LsF	Luverne-Smithdale complex, 15 to 35 percent slopes	46,125	11.5
MIA	Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded	20,625	5.2
MkC2	Maubila flaggy loam, 2 to 8 percent slopes, eroded	7,490	1.9
MsD	Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes	15,275	3.8
MsF	Maubila-Smithdale complex, 15 to 35 percent slopes	48,540	12.1
MsG	Maubila-Smithdale complex, 35 to 45 percent slopes	5,255	1.3
MtA	Minter silty clay loam, ponded	510	0.1
MvB	Minvale gravelly silt loam, 2 to 6 percent slopes	790	0.2
MvD	Minvale gravelly silt loam, 6 to 15 percent slopes	1,765	0.4
MW	Miscellaneous water	40	*
MwF	Montevallo-Townley complex, 15 to 35 percent slopes	235	*
MyA	Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded	1,510	0.4
NaC	Nauvoo sandy loam, 2 to 8 percent slopes	7,420	1.9
ObB	Ochlockonee-Riverview complex, gently undulating, frequently flooded	3,030	0.8
PBF	Palmerdale and Brilliant soils, 6 to 45 percent slopes	5,770	1.4
Pt	Pits-Udorthents complex	165	*
Ql	Quarry, limestone	125	*
RbG	Rock outcrop-Barfield complex, 15 to 60 percent slopes	120	*
SaD	Saffell gravelly sandy loam, 5 to 15 percent slopes	570	0.1
ShA	Savannah silt loam, 0 to 2 percent slopes	1,050	0.3
ShB	Savannah silt loam, 2 to 5 percent slopes	1,110	0.3
SmC	Smithdale sandy loam, 2 to 8 percent slopes	29,460	7.4
SmD	Smithdale sandy loam, 5 to 15 percent slopes	14,630	3.7
SnD	Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes	19,975	5.0
SsF	Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes	22,735	5.7
TaD	Talbott silt loam, 6 to 15 percent slopes, bouldery	1,485	0.4
ToB	Townley silt loam, 2 to 6 percent slopes	345	*

* See footnote at end of table.

Table 4.—Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Map unit name	Acres	Percent
ToD	Townley silt loam, 6 to 15 percent slopes	2,065	0.5
Ur	Urban land	190	*
W	Water	200	*
WbF	Wadley-Boykin complex, 15 to 35 percent slopes	1,415	0.4
WdE	Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes	5,645	1.4
WiB2	Wilcox clay loam, 2 to 5 percent slopes, eroded	130	*
WwD2	Wilcox-Boswell complex, 5 to 15 percent slopes, eroded	690	0.2
Total		399,980	100.0

* Less than 0.1 percent.

Table 5.—Land Capability and Yields per Acre of Pasture and Hay

[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 unit is not suited to the crop or the crop generally is not grown on the unit]

Map symbol and soil name	Land capability	Improved bermudagrass	Improved bermudagrass hay	Tall fescue
		*AUM **	*Tons*	*AUM **
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded		9.5	6	8
Annemaine	2w			
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded		9.5	6	8
Annemaine	2e			
BaA—Bama fine sandy loam, 0 to 2 percent slopes		10	—	—
Bama	1			
BaB—Bama fine sandy loam, 2 to 5 percent slopes		9.5	—	—
Bama	2e			
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded		—	—	8
Bibb Iuka	5w 5w			
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony		5	—	—
Bodine	4s			
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony		—	—	—
Bodine Minvale	7s 7e			
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony		—	—	—
Bodine Minvale	7s 7e			
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded		10	—	—
Cahaba	1			
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded		10	—	—
Cahaba	2e			
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded		—	—	9
Choccolocco	2w			
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded		10	—	—
Columbus	3w			
CoA—Colwell sandy loam, 0 to 2 percent slopes		11	—	—
Colwell	1			
CoB—Colwell sandy loam, 2 to 5 percent slopes		11	—	—
Colwell	2e			
CuB—Conecuh sandy loam, 2 to 5 percent slopes		7	—	—
Conecuh	3e			
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded		6	—	—
Conecuh Luverne	6e 6e			
FaA—Fluvaquents, ponded		—	—	—
Fluvaquents	7w			
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes		—	—	—
Fullerton	4e			
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes		—	—	—
Gorgas Rock outcrop	7s 8			
LdA—Lucedale sandy loam, 0 to 2 percent slopes		10	—	—
Lucedale	1			

* See footnote at end of table.

Table 5.—Land Capability and Yields per Acre of Pasture and Hay—Continued

Map symbol and soil name	Land capability	Improved bermudagrass	Improved bermudagrass hay	Tall fescue
		*AUM **	*Tons*	*AUM **
LdB—Lucedale sandy loam, 2 to 5 percent slopes		10	—	—
Lucedale	2e			
LnB—Luverne sandy loam, 2 to 5 percent slopes		9.5	—	—
Luverne	3e			
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes		8	—	—
Luverne Smithdale	6e 6e			
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes		—	—	—
Luverne Smithdale	7e 7e			
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded		—	—	—
Mantachie Iuka Kinston	5w 5w 5w			
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded		5.5	—	—
Maubila	4e			
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes		5.5	—	—
Maubila Smithdale Boykin	6e 6e 6s			
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes		—	—	—
Maubila Smithdale	7e 7e			
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes		—	—	—
Maubila Smithdale	7e 7e			
MtA—Minter silty clay loam, ponded		—	—	—
Minter	7w			
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes		—	—	—
Minvale	2e			
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes		8	—	—
Minvale	4e			
MW—Miscellaneous water		—	—	—
Water	—			
MwF—Montevallo-Townley complex, 15 to 35 percent slopes		—	—	—
Montevallo Townley	7e 7e			
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded		7.5	5	—
Myatt	3w			
NaC—Nauvoo sandy loam, 2 to 8 percent slopes		—	—	—
Nauvoo	3e			
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded		—	—	—
Ochlockonee Riverview	4w 4w			
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes		—	—	—
Palmerdale Brilliant	7s 7s			

* See footnote at end of table.

Table 5.—Land Capability and Yields per Acre of Pasture and Hay—Continued

Map symbol and soil name	Land capability	Improved bermudagrass	Improved bermudagrass hay	Tall fescue
		*AUM **	*Tons*	*AUM **
Pt—Pits-Udorthents complex		—	—	—
Pits Udorthents	8 8			
Ql—Quarry, limestone		—	—	—
Quarry, limestone	8			
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes		—	—	—
Rock outcrop Barfield	8 7e			
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes		5.5	—	—
Saffell	6e			
ShA—Savannah silt loam, 0 to 2 percent slopes		8.5	—	8
Savannah	2w			
ShB—Savannah silt loam, 2 to 5 percent slopes		8.5	—	8
Savannah	2e			
SmC—Smithdale sandy loam, 2 to 8 percent slopes		9	—	—
Smithdale	3e			
SmD—Smithdale sandy loam, 5 to 15 percent slopes		9	—	—
Smithdale	4e			
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes		—	—	—
Sipsey Nauvoo Townley	6e 6e 6e			
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes		—	—	—
Sipsey Nauvoo Sunlight	7e 7e 7e			
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery		—	—	—
Talbott	6e			
ToB—Townley silt loam, 2 to 6 percent slopes		—	4.5	—
Townley	3e			
ToD—Townley silt loam, 6 to 15 percent slopes		—	4.5	—
Townley	6e			
Ur—Urban land		—	—	—
Urban land	8			
W—Water		—	—	—
Water	—			
WbF—Wadley-Boykin complex, 15 to 35 percent slopes		—	—	—
Boykin Wadley	7e 7e			
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes		6.5	—	—
Wadley Smithdale Boykin	6s 6e 6s			
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded		—	—	8.5
Wilcox	3e			
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded		—	—	6
Wilcox Boswell	6e 6e			

* Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Table 6.—Land Capability and Yields per Acre of Cropland

[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 unit is not suited to the crop or the crop generally is not grown on the unit]

Map symbol and soil name	Land capability	Corn	Soybeans	Wheat
		Bu	*Bu*	*Bu*
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded		100	40	40
Annemaine	2w			
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded		100	40	40
Annemaine	2e			
BaA—Bama fine sandy loam, 0 to 2 percent slopes		90	35	40
Bama	1			
BaB—Bama fine sandy loam, 2 to 5 percent slopes		85	35	35
Bama	2e			
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded		—	—	—
Bibb Iuka	5w 5w			
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony		—	—	—
Bodine	4s			
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony		—	—	—
Bodine Minvale	7s 7e			
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony		—	—	—
Bodine Minvale	7s 7e			
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded		90	35	—
Cahaba	1			
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded		90	35	—
Cahaba	2e			
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded		95	35	40
Choccolocco	2w			
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded		—	30	—
Columbus	3w			
CoA—Colwell sandy loam, 0 to 2 percent slopes		100	45	—
Colwell	1			
CoB—Colwell sandy loam, 2 to 5 percent slopes		95	35	—
Colwell	2e			
CuB—Conecuh sandy loam, 2 to 5 percent slopes		—	—	—
Conecuh	3e			
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded		—	—	—
Conecuh Luverne	6e 6e			
FaA—Fluvaquents, ponded		—	—	—
Fluvaquents	7w			
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes		75	—	45
Fullerton	4e			
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes		—	—	—
Gorgas Rock outcrop	7s 8			
LdA—Lucedale sandy loam, 0 to 2 percent slopes		75	35	50
Lucedale	1			
LdB—Lucedale sandy loam, 2 to 5 percent slopes		80	40	50
Lucedale	2e			
LnB—Luverne sandy loam, 2 to 5 percent slopes		75	40	—
Luverne	3e			

Table 6.—Land Capability and Yields per Acre of Cropland—Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Wheat
		Bu	*Bu*	*Bu*
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes		—	—	—
Luverne Smithdale	6e 6e			
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes		—	—	—
Luverne Smithdale	7e 7e			
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded		—	—	—
Mantachie Iuka Kinston	5w 5w 5w			
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded		—	—	—
Maubila	4e			
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes		—	—	—
Maubila Smithdale Boykin	6e 6e 6s			
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes		—	—	—
Maubila Smithdale	7e 7e			
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes		—	—	—
Maubila Smithdale	7e 7e			
MtA—Minter silty clay loam, ponded		—	—	—
Minter	7w			
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes		85	30	45
Minvale	2e			
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes		65	25	40
Minvale	4e			
MW—Miscellaneous water		—	—	—
Water	—			
MwF—Montevallo-Townley complex, 15 to 35 percent slopes		—	—	—
Montevallo Townley	7e 7e			
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded		—	25	—
Myatt	3w			
NaC—Nauvoo sandy loam, 2 to 8 percent slopes		60	25	—
Nauvoo	3e			
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded		—	30	—
Ochlockonee Riverview	4w 4w			
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes		—	—	—
Palmerdale Brilliant	7s 7s			
Pt—Pits-Udorthents complex		—	—	—
Pits Udorthents	8 8			
Ql—Quarry, limestone		—	—	—
Quarry, limestone	8			
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes		—	—	—
Rock outcrop Barfield	8 7e			

Table 6.—Land Capability and Yields per Acre of Cropland—Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Wheat
		Bu	*Bu*	*Bu*
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes		—	—	—
Saffell	6e			
ShA—Savannah silt loam, 0 to 2 percent slopes		80	35	40
Savannah	2w			
ShB—Savannah silt loam, 2 to 5 percent slopes		75	35	40
Savannah	2e			
SmC—Smithdale sandy loam, 2 to 8 percent slopes		70	30	—
Smithdale	3e			
SmD—Smithdale sandy loam, 5 to 15 percent slopes		55	25	—
Smithdale	4e			
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes		—	—	—
Sipsey Nauvoo Townley	6e 6e 6e			
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes		—	—	—
Sipsey Nauvoo Sunlight	7e 7e 7e			
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery		—	—	40
Talbott	6e			
ToB—Townley silt loam, 2 to 6 percent slopes		—	—	—
Townley	3e			
ToD—Townley silt loam, 6 to 15 percent slopes		—	—	—
Townley	6e			
Ur—Urban land		—	—	—
Urban land	8			
W—Water		—	—	—
Water	—			
WbF—Wadley-Boykin complex, 15 to 35 percent slopes		—	—	—
Boykin Wadley	7e 7e			
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes		—	—	—
Wadley Smithdale Boykin	6s 6e 6s			
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded		70	35	30
Wilcox	3e			
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded		—	—	—
Wilcox Boswell	6e 6e			

Table 7.—Forestland Productivity

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded				
Annemaine	Loblolly pine	90	114	Cherrybark oak, loblolly pine, sweetgum, yellow-poplar
	Shortleaf pine	80	114	
	Sweetgum	80	86	
	Water oak	90	100	
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded				
Annemaine	Loblolly pine	90	114	Cherrybark oak, loblolly pine, sweetgum, yellow-poplar
	Shortleaf pine	80	114	
	Sweetgum	80	86	
	Water oak	90	100	
BaA—Bama fine sandy loam, 0 to 2 percent slopes				
Bama	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	80	86	
BaB—Bama fine sandy loam, 2 to 5 percent slopes				
Bama	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	80	86	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded				
Bibb	Loblolly pine	100	157	Eastern cottonwood, loblolly pine, sweetgum, yellow-poplar
	Sweetgum	90	100	
	Water oak	90	86	
	Yellow-poplar	90	—	
Iuka	Eastern cottonwood	105	143	Eastern cottonwood, loblolly pine, yellow-poplar
	Loblolly pine	100	129	
	Sweetgum	100	143	
	Water oak	100	100	
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony				
Bodine	Black oak	70	57	Loblolly pine, shortleaf pine
	Shortleaf pine	60	114	
	Southern red oak	70	57	
	Yellow-poplar	90	86	
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony				
Bodine	Black oak	70	57	Loblolly pine, shortleaf pine
	Shortleaf pine	70	114	
	Southern red oak	70	57	
	Yellow-poplar	90	86	
Minvale	Loblolly pine	80	114	Black walnut, loblolly pine, yellow-poplar
	Shortleaf pine	70	114	
	Virginia pine	70	114	
	White oak	70	57	
	Yellow-poplar	90	86	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony				
Bodine	Black oak	70	57	Loblolly pine, shortleaf pine
	Shortleaf pine	60	114	
	Southern red oak	70	57	
	Yellow-poplar	90	86	
Minvale	Loblolly pine	80	114	Black walnut, loblolly pine, yellow-poplar
	Shortleaf pine	70	114	
	Virginia pine	70	114	
	White oak	70	57	
	Yellow-poplar	90	86	
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded				
Cahaba	Loblolly pine	87	129	Loblolly pine, sweetgum, water oak
	Shortleaf pine	70	114	
	Sweetgum	90	100	
	Yellow-poplar	90	0	
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded				
Cahaba	Loblolly pine	87	129	Loblolly pine, sweetgum, water oak
	Shortleaf pine	70	114	
	Sweetgum	90	100	
	Yellow-poplar	90	—	
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded				
Choccolocco	Loblolly pine	80	114	Loblolly pine, Virginia pine, yellow-poplar
	Shortleaf pine	70	114	
	Southern red oak	70	57	
	Virginia pine	70	114	
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded				
Columbus	Loblolly pine	90	129	Loblolly pine, sweetgum, yellow-poplar
	Sweetgum	85	86	
	Water oak	90	86	
	Yellow-poplar	90	86	
CoA—Colwell sandy loam, 0 to 2 percent slopes				
Colwell	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
CoB—Colwell sandy loam, 2 to 5 percent slopes				
Colwell	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
CuB—Conecuh sandy loam, 2 to 5 percent slopes				
Conecuh	Loblolly pine	90	129	Loblolly pine, sweetgum, water oak
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Water oak	90	86	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded				
Conecuh	Loblolly pine	90	129	Loblolly pine, sweetgum, water oak
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Water oak	90	86	
Luverne	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	80	86	
FaA—Fluvaquents, ponded				
Fluvaquents	Baldcypress	80	100	Baldcypress, green ash
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes				
Fullerton	Shortleaf pine	70	100	Loblolly pine, yellow-poplar
	Southern red oak	70	57	
	Yellow-poplar	90	86	
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes				
Gorgas	Loblolly pine	70	86	Eastern redcedar, loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	60	86	
Rock outcrop	—	—	—	—
LdA—Lucedale sandy loam, 0 to 2 percent slopes				
Lucedale	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	75	86	
LdB—Lucedale sandy loam, 2 to 5 percent slopes				
Lucedale	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	75	86	
LnB—Luverne sandy loam, 2 to 5 percent slopes				
Luverne	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes				
Luverne	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	80	72	
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes				
Luverne	Loblolly pine	90	129	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded				
Mantachie	American sycamore	85	100	American sycamore, cherrybark oak, green ash, loblolly pine, sweetgum, water oak, yellow-poplar
	Green ash	85	57	
	Loblolly pine	100	143	
	Sweetgum	90	114	
	Water oak	90	143	
	Yellow-poplar	90	100	
Iuka	American sycamore	110	—	American sycamore, cherrybark oak, eastern cottonwood, green ash, loblolly pine, water oak, yellow-poplar
	Green ash	85	143	
	Loblolly pine	100	129	
	Sweetgum	105	143	
	Water oak	100	100	
	Yellow-poplar	110	—	
Kinston	Green ash	85	129	Cherrybark oak, green ash, loblolly pine, sweetgum, water oak
	Loblolly pine	100	157	
	Sweetgum	90	114	
	Water oak	100	72	
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded				
Maubila	Loblolly pine	75	114	Loblolly pine, longleaf pine
	Longleaf pine	60	86	
	Shortleaf pine	65	114	
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes				
Maubila	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
	Shortleaf pine	70	114	
Smithdale	Loblolly pine	86	129	Loblolly pine, longleaf pine
	Longleaf pine	69	72	
Boykin	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	75	100	
	Shortleaf pine	75	129	
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes				
Maubila	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
	Shortleaf pine	70	114	
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes				
Maubila	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	70	86	
	Shortleaf pine	70	114	
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	
MtA—Minter silty clay loam, ponded				
Minter	Baldcypress	80	100	Baldcypress, Water tupelo
	Water tupelo	70	—	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes				
Minvale	Loblolly pine	80	114	Black walnut, loblolly pine, yellow-poplar
	Shortleaf pine	70	114	
	Virginia pine	70	114	
	White oak	70	57	
	Yellow-poplar	90	86	
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes				
Minvale	Loblolly pine	80	114	Black walnut, loblolly pine, yellow-poplar
	Shortleaf pine	70	114	
	Virginia pine	70	114	
	White oak	70	57	
	Yellow-poplar	90	86	
MW—Miscellaneous water				
Water	—	—	—	—
MwF—Montevallo-Townley complex, 15 to 35 percent slopes				
Montevallo	Loblolly pine	60	72	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	60	86	
Townley	Loblolly pine	70	86	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	65	114	
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded				
Myatt	Green ash	80	0	Cherrybark oak, green ash, loblolly pine, sweetgum, water oak
	Loblolly pine	95	129	
	Sweetgum	90	114	
	Water oak	95	86	
NaC—Nauvoo sandy loam, 2 to 8 percent slopes				
Nauvoo	Loblolly pine	90	129	Loblolly pine, shortleaf pine, sweetgum, Virginia pine, yellow-poplar
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Virginia pine	80	114	
	Yellow-poplar	100	114	
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded				
Ochlockonee	American sycamore	110	—	American sycamore, cherrybark oak, green ash, loblolly pine, sweetgum, water oak, yellow-poplar
	Green ash	85	—	
	Loblolly pine	100	—	
	Sweetgum	110	—	
	Water oak	100	—	
	Yellow-poplar	110	—	
Riverview	American sycamore	105	—	American sycamore, cherrybark oak, eastern cottonwood, loblolly pine, sweetgum, water oak, yellow-poplar
	Green ash	85	—	
	Loblolly pine	100	157	
	Sweetgum	105	143	
	Water oak	100	—	
	Yellow-poplar	115	129	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes				
Palmerdale	American sycamore	90	100	American sycamore, eastern cottonwood, loblolly pine, Virginia pine
	Eastern cottonwood	90	100	
	Loblolly pine	80	114	
	Sweetgum	80	86	
	Virginia pine	70	114	
Brilliant	American sycamore	90	100	American sycamore, eastern cottonwood, loblolly pine, Virginia pine
	Eastern cottonwood	90	100	
	Loblolly pine	85	114	
	Sweetgum	85	86	
	Virginia pine	75	114	
Pt—Pits-Udorthents complex				
Pits	—	—	—	—
Udorthents	Loblolly pine	75	—	Loblolly pine, longleaf pine, shortleaf pine
	Shortleaf pine	65	—	
Ql—Quarry, limestone				
Quarry, limestone	Eastern redcedar	40	—	Eastern redcedar
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes				
Rock outcrop	—	—	—	—
Barfield	Eastern redcedar	40	43	Eastern redcedar
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes				
Saffell	Loblolly pine	70	100	Loblolly pine, longleaf pine
	Shortleaf pine	60	100	
ShA—Savannah silt loam, 0 to 2 percent slopes				
Savannah	Loblolly pine	90	129	American sycamore, loblolly pine, sweetgum, yellow-poplar
	Longleaf pine	75	100	
	Sweetgum	85	86	
ShB—Savannah silt loam, 2 to 5 percent slopes				
Savannah	Loblolly pine	90	129	American sycamore, loblolly pine, sweetgum, yellow-poplar
	Longleaf pine	75	100	
	Sweetgum	85	86	
SmC—Smithdale sandy loam, 2 to 8 percent slopes				
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	
SmD—Smithdale sandy loam, 5 to 15 percent slopes				
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes				
Sipsey	Loblolly pine	85	129	Loblolly pine, shortleaf pine, sweetgum, Virginia pine, yellow-poplar
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Virginia pine	80	114	
	Yellow-poplar	100	114	
Nauvoo	Loblolly pine	90	129	Loblolly pine, shortleaf pine, sweetgum, Virginia pine, yellow-poplar
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Virginia pine	80	114	
	Yellow-poplar	100	114	
Townley	Loblolly pine	70	86	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	70	114	
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes				
Sipsey	Loblolly pine	80	129	Loblolly pine, shortleaf pine, sweetgum, Virginia pine, yellow-poplar
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Virginia pine	80	114	
	Yellow-poplar	100	114	
Nauvoo	Loblolly pine	89	129	Loblolly pine, shortleaf pine, sweetgum, Virginia pine, yellow-poplar
	Shortleaf pine	80	129	
	Sweetgum	90	100	
	Virginia pine	80	114	
	Yellow-poplar	100	114	
Sunlight	Loblolly pine	60	72	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	60	86	
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery				
Talbott	Eastern redcedar	46	57	Eastern redcedar, loblolly pine, shortleaf pine, Virginia pine
	Loblolly pine	80	114	
	Northern red oak	65	43	
	Shortleaf pine	55	100	
ToB—Townley silt loam, 2 to 6 percent slopes				
Townley	Loblolly pine	70	86	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	70	114	
ToD—Townley silt loam, 6 to 15 percent slopes				
Townley	Loblolly pine	70	86	Loblolly pine, Virginia pine
	Shortleaf pine	60	86	
	Virginia pine	70	114	
Ur—Urban land				
Urban land	—	—	—	—
W—Water				
Water	—	—	—	—

Table 7.—Forestland Productivity—Continued

Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			Cu ft/ac	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes				
Boykin	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	75	100	
	Shortleaf pine	75	129	
Wadley	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	80	100	
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes				
Wadley	Loblolly pine	85	114	Loblolly pine, longleaf pine
	Longleaf pine	79	100	
Smithdale	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	70	72	
Boykin	Loblolly pine	85	129	Loblolly pine, longleaf pine
	Longleaf pine	75	100	
	Shortleaf pine	75	129	
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded				
Wilcox	Loblolly pine	90	114	Loblolly pine
	Shortleaf pine	70	100	
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded				
Wilcox	Loblolly pine	90	114	Loblolly pine
	Shortleaf pine	70	100	
Boswell	Loblolly pine	80	114	Loblolly pine, shortleaf pine
	Shortleaf pine	70	114	

Table 8a.—Forestland Management (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Well suited		Well suited		Well suited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Well suited		Well suited		Well suited	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	Well suited		Well suited		Moderately suited	
						Low strength	0.50
Iuka	35	Well suited		Well suited		Well suited	
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Well suited		Unsuited		Moderately suited	
				Slope	1.00	Slope	0.50
				Rock fragments	0.50		
Minvale	40	Well suited		Unsuited		Moderately suited	
				Slope	1.00	Slope	0.50
				Rock fragments	0.50		
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50		
Minvale	30	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50		
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Well suited		Well suited		Well suited	
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Well suited		Well suited		Well suited	

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Well suited		Well suited		Moderately suited	
						Low strength	0.50
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Well suited		Well suited		Moderately suited	
						Low strength	0.50
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Well suited		Well suited		Well suited	
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Well suited		Well suited		Well suited	
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
				Slope	0.50		
Luverne	35	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
				Slope	0.50		
FaA—Fluvaquents, ponded							
Fluvaquents	95	Moderately suited		Poorly suited		Poorly suited	
		Wetness	0.50	Wetness	0.75	Wetness	1.00
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Rock fragments	0.50
Rock outcrop	30	Unsuited		Unsuited		Poorly suited	
		Restrictive layer	1.00	Restrictive layer	1.00	Slope	1.00
		Slope	0.50	Slope	1.00	Stickiness; high plasticity index	0.50
		Sandiness	0.50	Sandiness	0.50		
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Well suited		Well suited		Well suited	

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Well suited		Well suited		Well suited	
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Moderately suited		Moderately suited		Well suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50		
				Slope	0.50		
Smithdale	30	Well suited		Moderately suited		Well suited	
				Slope	0.50		
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Slope	0.50
				Stickiness; high plasticity index	0.50		
Smithdale	30	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Well suited		Well suited		Well suited	
Iuka	30	Well suited		Well suited		Well suited	
Kinston	25	Well suited		Well suited		Moderately suited	
						Low strength	0.50
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
Smithdale	35	Well suited		Moderately suited		Well suited	
				Slope	0.50		
Boykin	20	Well suited		Moderately suited		Well suited	
				Slope	0.50		
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
				Rock fragments	0.50		
Smithdale	30	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50		
Smithdale	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
MtA—Minter silty clay loam, ponded							
Minter	95	Moderately suited		Moderately suited		Poorly suited	
		Stickiness; high plasticity index	0.50	Wetness	0.50	Wetness	1.00
		Wetness	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Well suited		Moderately suited		Well suited	
				Rock fragments	0.50		
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Well suited		Unsuited		Moderately suited	
				Slope	1.00	Slope	0.50
				Rock fragments	0.50		
Townley	30	Moderately suited		Unsuited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	1.00	Slope	0.50
				Stickiness; high plasticity index	0.50	Low strength	0.50
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	90	Well suited		Well suited		Moderately suited	
						Low strength	0.50
NaC—Nauvoo sandy loam 2 to 8 percent slopes							
Nauvoo	80	Well suited		Moderately suited		Well suited	
				Slope	0.50		
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Well suited		Well suited		Well suited	
Riverview	30	Well suited		Well suited		Well suited	

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Moderately suited		Unsuited		Moderately suited	
		Rock fragments	0.50	Slope	1.00	Slope	0.50
				Rock fragments	0.75		
Brilliant	40	Moderately suited		Unsuited		Moderately suited	
		Rock fragments	0.50	Slope	1.00	Slope	0.50
				Rock fragments	1.00		
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Stickiness; high plasticity index	0.50
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Unsuited		Unsuited		Poorly suited	
		Restrictive layer	1.00	Restrictive layer	1.00	Slope	1.00
		Slope	0.50	Slope	1.00	Stickiness; high plasticity index	0.50
		Sandiness	0.50	Sandiness	0.50		
Barfield	35	Poorly suited		Unsuited		Poorly suited	
		Stickiness; high plasticity index	0.75	Slope	1.00	Slope	1.00
		Slope	0.50	Stickiness; high plasticity index	0.75	Low strength	0.50
				Rock fragments	0.50		
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Moderately suited		Poorly suited		Well suited	
		Rock fragments	0.50	Rock fragments	0.75		
				Slope	0.50		
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Well suited		Well suited		Moderately suited	
						Low strength	0.50
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Well suited		Moderately suited		Well suited	
				Slope	0.50		
Nauvoo	30	Well suited		Moderately suited		Well suited	
				Slope	0.50		
Townley	15	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
				Slope	0.50		
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
Nauvoo	30	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
Sunlight	20	Moderately suited		Poorly suited		Moderately suited	
		Restrictive layer	0.50	Slope	0.75	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.75		
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	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		
Kinston	3	Well suited		Well suited		Moderately suited	
						Low strength	0.50
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
				Slope	0.50		
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
Wadley	40	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50

Table 8a.—Forestland Management (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Well suited		Moderately suited		Well suited	
				Slope	0.50		
Smithdale	30	Well suited		Moderately suited		Well suited	
				Slope	0.50		
Boykin	15	Well suited		Moderately suited		Well suited	
				Slope	0.50		
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	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
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	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
Boswell	30	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 8b.—Forestland Management (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded					
Annemaine	85	Well suited		Well suited	
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded					
Annemaine	85	Well suited		Well suited	
BaA—Bama fine sandy loam, 0 to 2 percent slopes					
Bama	95	Well suited		Well suited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes					
Bama	95	Well suited		Well suited	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded					
Bibb	50	Well suited		Well suited	
Iuka	35	Well suited		Well suited	
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony					
Bodine	80	Well suited		Well suited	
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony					
Bodine	50	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Minvale	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony					
Bodine	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
Minvale	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded					
Cahaba	85	Well suited		Well suited	
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded					
Cahaba	85	Well suited		Well suited	
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded					
Choccolocco	80	Well suited		Well suited	
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded					
Columbus	90	Well suited		Well suited	
CoA—Colwell sandy loam, 0 to 2 percent slopes					
Colwell	90	Well suited		Well suited	
CoB—Colwell sandy loam, 2 to 5 percent slopes					
Colwell	90	Well suited		Well suited	

Table 8b.—Forestland Management (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
CuB—Conecuh sandy loam, 2 to 5 percent slopes					
Conecuh	80	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded					
Conecuh	50	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Luverne	35	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
FaA—Fluvaquents, ponded					
Fluvaquents	95	Poorly suited		Unsuited	
		Wetness	0.50	Wetness	1.00
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes					
Fullerton	80	Well suited		Well suited	
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes					
Gorgas	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
Rock outcrop	30	Unsuited		Unsuited	
		Restrictive layer	1.00	Restrictive layer	1.00
		Slope	1.00	Slope	1.00
LdA—Lucedale sandy loam, 0 to 2 percent slopes					
Lucedale	95	Well suited		Well suited	
LdB—Lucedale sandy loam, 2 to 5 percent slopes					
Lucedale	90	Well suited		Well suited	
LnB—Luverne sandy loam, 2 to 5 percent slopes					
Luverne	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes					
Luverne	60	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Smithdale	30	Well suited		Well suited	
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes					
Luverne	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
Smithdale	30	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50

Table 8b.—Forestland Management (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded					
Mantachie	35	Well suited		Well suited	
Iuka	30	Well suited		Well suited	
Kinston	25	Well suited		Well suited	
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded					
Maubila	85	Well suited		Well suited	
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes					
Maubila	35	Well suited		Well suited	
Smithdale	35	Well suited		Well suited	
Boykin	20	Well suited		Well suited	
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes					
Maubila	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Smithdale	30	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes					
Maubila	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
Smithdale	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
MtA—Minter silty clay loam, ponded					
Minter	95	Poorly suited		Unsuited	
		Wetness	0.50	Wetness	1.00
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes					
Minvale	90	Well suited		Well suited	
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes					
Minvale	85	Well suited		Well suited	
MW—Miscellaneous water					
Water	100	Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes					
Montevallo	50	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Townley	30	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded					
Myatt	90	Well suited		Well suited	
NaC—Nauvoo sandy loam 2 to 8 percent slopes					
Nauvoo	80	Well suited		Well suited	
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded					
Ochlockonee	60	Well suited		Well suited	
Riverview	30	Well suited		Well suited	

Table 8b.—Forestland Management (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes					
Palmerdale	50	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50		
Brilliant	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
Pt—Pits-Udorthents complex					
Pits	70	Not rated		Not rated	
Udorthents	25	Well suited		Well suited	
Ql—Quarry, limestone					
Quarry, limestone	95	Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes					
Rock outcrop	45	Unsuited		Unsuited	
		Restrictive layer	1.00	Restrictive layer	1.00
		Slope	1.00	Slope	1.00
Barfield	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50		
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes					
Saffell	85	Poorly suited		Well suited	
		Rock fragments	0.50		
ShA—Savannah silt loam, 0 to 2 percent slopes					
Savannah	90	Well suited		Well suited	
ShB—Savannah silt loam, 2 to 5 percent slopes					
Savannah	85	Well suited		Well suited	
SmC—Smithdale sandy loam, 2 to 8 percent slopes					
Smithdale	85	Well suited		Well suited	
SmD—Smithdale sandy loam, 5 to 15 percent slopes					
Smithdale	85	Well suited		Well suited	
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes					
Sipsey	45	Well suited		Unsuited	
				Restrictive layer	1.00
Nauvoo	30	Well suited		Well suited	
Townley	15	Well suited		Well suited	
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes					
Sipsey	40	Poorly suited		Unsuited	
		Slope	0.50	Restrictive layer	1.00
				Slope	0.50
Nauvoo	30	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Sunlight	20	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50		

Table 8b.—Forestland Management (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery					
Talbott	80	Poorly suited		Poorly suited	
		Stickiness; high plasticity index	0.50	Restrictive layer	0.50
Kinston	3	Well suited		Well suited	
ToB—Townley silt loam, 2 to 6 percent slopes					
Townley	80	Well suited		Well suited	
ToD—Townley silt loam, 6 to 15 percent slopes					
Townley	80	Well suited		Well suited	
Ur—Urban land					
Urban land	95	Not rated		Not rated	
W—Water					
Water	100	Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes					
Boykin	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Wadley	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes					
Wadley	45	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Smithdale	30	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Boykin	15	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded					
Wilcox	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded					
Wilcox	50	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Boswell	30	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		

Table 8c.—Forestland Management (Part 3)

[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 potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations]

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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Slight		Slight		Moderately suited	
						Low strength	0.50
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Slight		Slight		Well suited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
Iuka	35	Slight		Slight		Poorly suited	
						Flooding	1.00
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Minvale	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Minvale	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Slight		Slight		Well suited	
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		

Table 8c.—Forestland Management (Part 3)—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
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Slight		Slight		Moderately suited	
						Flooding	0.50
						Low strength	0.50
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Slight		Slight		Well suited	
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Luverne	35	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
FaA—Fluvaquents, ponded							
Fluvaquents	95	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop	30	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
		Slope/erodibility	0.75	Slope/erodibility	0.95	Stickiness; high plasticity index	0.50
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Slight		Slight		Well suited	

Table 8c.—Forestland Management (Part 3)—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
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Smithdale	30	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Smithdale	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	0.50
Iuka	30	Slight		Slight		Poorly suited	
						Flooding	1.00
Kinston	25	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Smithdale	35	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Boykin	20	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Smithdale	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00

Table 8c.—Forestland Management (Part 3)—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
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Smithdale	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
MtA—Minter silty clay loam, ponded							
Minter	95	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Slight		Slight		Well suited	
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Townley	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	90	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
NaC—Nauvoo sandy loam 2 to 8 percent slopes							
Nauvoo	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Slight		Slight		Poorly suited	
						Flooding	1.00
Riverview	30	Slight		Slight		Poorly suited	
						Flooding	1.00
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Brilliant	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00

Table 8c.—Forestland Management (Part 3)—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
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Stickiness; high plasticity index	0.50
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
		Slope/erodibility	0.75	Slope/erodibility	0.95	Stickiness; high plasticity index	0.50
Barfield	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Slight		Slight		Moderately suited	
						Low strength	0.50
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Nauvoo	30	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Townley	15	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50

Table 8c.—Forestland Management (Part 3)—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
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Nauvoo	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Sunlight	20	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
Kinston	3	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Wadley	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
Smithdale	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Boykin	15	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Stickiness; high plasticity index	0.50

Table 8c.—Forestland Management (Part 3)—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
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50
Boswell	30	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50

Table 8d.—Forestland Management (Part 4)

[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 potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations]

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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Slight		Well suited		Moderate	
						Low strength	0.50
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Slight		Well suited		Moderate	
						Low strength	0.50
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	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		
Iuka	35	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Slight		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
Minvale	40	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00	Strength	0.10
Minvale	30	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Slight		Well suited		Moderate	
						Low strength	0.50
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Slight		Well suited		Moderate	
						Low strength	0.50

Table 8d.—Forestland Management (Part 4)—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
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Moderate		Moderately suited		Severe	
		Flooding	0.50	Flooding	0.50	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Slight		Well suited		Moderate	
						Low strength	0.50
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Slight		Well suited		Moderate	
						Low strength	0.50
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Moderate		Well suited		Moderate	
		Low strength	0.50			Low strength	0.50
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Moderate		Moderately suited		Moderate	
		Low strength	0.50	Slope	0.50	Low strength	0.50
Luverne	35	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
FaA—Fluvaquents, ponded							
Fluvaquents	95	Severe		Poorly suited		Moderate	
		Flooding	1.00	Ponding	1.00	Wetness	0.50
		Wetness	1.00	Flooding	1.00	Low strength	0.50
				Wetness	1.00		
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Moderate		Moderately suited		Slight	
		Stickiness/slope	0.50	Slope	0.50	Strength	0.10
		Low strength	0.50				
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
				Rock fragments	0.50		
Rock outcrop	30	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00		
				Stickiness; high plasticity index	0.50		

Table 8d.—Forestland Management (Part 4)—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
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Slight		Well suited		Moderate	
						Low strength	0.50
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Slight		Well suited		Moderate	
						Low strength	0.50
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Slight		Well suited		Moderate	
						Low strength	0.50
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
Smithdale	30	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Smithdale	30	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
				Wetness	0.50		
Iuka	30	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
Kinston	25	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		
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Moderate		Well suited		Moderate	
		Low strength	0.50			Low strength	0.50
		Stickiness/slope	0.50				
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Moderate		Moderately suited		Moderate	
		Stickiness/slope	0.50	Slope	0.50	Low strength	0.50
		Low strength	0.50				
Smithdale	35	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
Boykin	20	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50

Table 8d.—Forestland Management (Part 4)—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
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Stickiness/slope	0.50				
Smithdale	30	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Low strength	0.50				
Smithdale	35	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
MtA—Minter silty clay loam, ponded							
Minter	95	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Low strength	0.50	Wetness	1.00		
				Low strength	0.50		
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Slight		Well suited		Moderate	
						Low strength	0.50
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
Townley	30	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	90	Slight		Poorly suited		Severe	
				Wetness	1.00	Low strength	1.00
				Low strength	0.50		
NaC—Nauvoo sandy loam 2 to 8 percent slopes							
Nauvoo	80	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50

Table 8d.—Forestland Management (Part 4)—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
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
Riverview	30	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
Brilliant	40	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00		
				Stickiness; high plasticity index	0.50		
Barfield	35	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Slight		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Slight		Well suited		Moderate	
						Low strength	0.50
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50

Table 8d.—Forestland Management (Part 4)—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
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
Nauvoo	30	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
Townley	15	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Nauvoo	30	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Sunlight	20	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Moderate		Moderately suited		Severe	
		Restrictive layer	0.50	Slope	0.50	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Kinston	3	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		
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Wadley	40	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50

Table 8d.—Forestland Management (Part 4)—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
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Smithdale	30	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Boykin	15	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	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		
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Moderate		Moderately suited		Severe	
		Stickiness/slope	0.50	Slope	0.50	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		
Boswell	30	Slight		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Low strength	0.50		

Table 8e.—Forestland Management (Part 5)

[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 potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Potential for seedling mortality	
		Rating class and limiting features	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded			
Annemaine	85	Low	
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded			
Annemaine	85	Low	
BaA—Bama fine sandy loam, 0 to 2 percent slopes			
Bama	95	Low	
BaB—Bama fine sandy loam, 2 to 5 percent slopes			
Bama	95	Low	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded			
Bibb	50	High	
		Wetness	1.00
Iuka	35	Low	
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony			
Bodine	80	Low	
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony			
Bodine	50	Moderate	
		Available water	0.50
Minvale	40	Moderate	
		Available water	0.50
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony			
Bodine	60	Moderate	
		Available water	0.50
Minvale	30	Moderate	
		Available water	0.50
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded			
Cahaba	85	Low	
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded			
Cahaba	85	Low	
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded			
Choccolocco	80	Low	
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded			
Columbus	90	Low	
CoA—Colwell sandy loam, 0 to 2 percent slopes			
Colwell	90	Low	
CoB—Colwell sandy loam, 2 to 5 percent slopes			
Colwell	90	Low	
CuB—Conecuh sandy loam, 2 to 5 percent slopes			
Conecuh	80	Low	
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded			
Conecuh	50	Low	
Luverne	35	Low	

Table 8e.—Forestland Management (Part 5)—Continued

Map symbol and soil name	Pct. of map unit	Potential for seedling mortality	
		Rating class and limiting features	Value
FaA—Fluvaquents, ponded			
Fluvaquents	95	High	
		Wetness	1.00
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes			
Fullerton	80	Low	
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes			
Gorgas	50	Moderate	
		Available water	0.50
Rock outcrop	30	Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes			
Lucedale	95	Low	
LdB—Lucedale sandy loam, 2 to 5 percent slopes			
Lucedale	90	Low	
LnB—Luverne sandy loam, 2 to 5 percent slopes			
Luverne	85	Low	
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes			
Luverne	60	Low	
Smithdale	30	Low	
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes			
Luverne	60	Moderate	
		Available water	0.50
Smithdale	30	Moderate	
		Available water	0.50
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded			
Mantachie	35	High	
		Wetness	1.00
Iuka	30	Low	
Kinston	25	High	
		Wetness	1.00
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded			
Maubila	85	Low	
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes			
Maubila	35	Low	
Smithdale	35	Low	
Boykin	20	Low	
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes			
Maubila	60	Moderate	
		Available water	0.50
Smithdale	30	Moderate	
		Available water	0.50
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes			
Maubila	50	Moderate	
		Available water	0.50
Smithdale	35	Moderate	
		Available water	0.50
MtA—Minter silty clay loam, ponded			
Minter	95	High	
		Wetness	1.00

Table 8e.—Forestland Management (Part 5)—Continued

Map symbol and soil name	Pct. of map unit	Potential for seedling mortality	
		Rating class and limiting features	Value
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes			
Minvale	90	Low	
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes			
Minvale	85	Low	
MW—Miscellaneous water			
Water	100	Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes			
Montevallo	50	Moderate	
		Available water	0.50
Townley	30	Moderate	
		Available water	0.50
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded			
Myatt	90	High	
		Wetness	1.00
NaC—Nauvoo sandy loam 2 to 8 percent slopes			
Nauvoo	80	Low	
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded			
Ochlockonee	60	Low	
Riverview	30	Low	
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes			
Palmerdale	50	Moderate	
		Available water	0.50
Brilliant	40	Moderate	
		Available water	0.50
Pt—Pits-Udorthents complex			
Pits	70	Not rated	
Udorthents	25	Low	
Ql—Quarry, limestone			
Quarry, limestone	95	Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes			
Rock outcrop	45	Not rated	
Barfield	35	Moderate	
		Available water	0.50
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes			
Saffell	85	Low	
ShA—Savannah silt loam, 0 to 2 percent slopes			
Savannah	90	Low	
ShB—Savannah silt loam, 2 to 5 percent slopes			
Savannah	85	Low	
SmC—Smithdale sandy loam, 2 to 8 percent slopes			
Smithdale	85	Low	
SmD—Smithdale sandy loam, 5 to 15 percent slopes			
Smithdale	85	Low	
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes			
Sipsey	45	Low	
Nauvoo	30	Low	
Townley	15	Low	

Table 8e.—Forestland Management (Part 5)—Continued

Map symbol and soil name	Pct. of map unit	Potential for seedling mortality	
		Rating class and limiting features	Value
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes			
Sipsey	40	Moderate	
		Available water	0.50
Nauvoo	30	Moderate	
		Available water	0.50
Sunlight	20	Moderate	
		Available water	0.50
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery			
Talbott	80	Low	
Kinston	3	High	
		Wetness	1.00
ToB—Townley silt loam, 2 to 6 percent slopes			
Townley	80	Low	
ToD—Townley silt loam, 6 to 15 percent slopes			
Townley	80	Low	
Ur—Urban land			
Urban land	95	Not rated	
W—Water			
Water	100	Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes			
Boykin	40	Moderate	
		Available water	0.50
Wadley	40	Moderate	
		Available water	0.50
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes			
Wadley	45	Low	
Smithdale	30	Low	
Boykin	15	Low	
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded			
Wilcox	90	Low	
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded			
Wilcox	50	Low	
Boswell	30	Low	

Table 9a.—Recreational Development (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. 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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Slow water movement	0.96	Slow water movement	0.96
		Slow water movement	0.96	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Slow water movement	0.96	Slow water movement	0.96
		Slow water movement	0.96	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39			Slope	0.13
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Not limited		Not limited		Somewhat limited	
						Slope	0.50
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	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
Iuka	35	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.99	Gravel content	0.99	Slope	1.00
		Slope	0.37	Slope	0.37	Gravel content	1.00
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.99	Gravel content	0.99	Gravel content	1.00
Minvale	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00

Table 9a.—Recreational Development (Part 1)—Continued

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
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.99	Gravel content	0.99	Gravel content	1.00
Minvale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.01	Too sandy	0.01
		Too sandy	0.01				
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.01	Slope	0.13
		Too sandy	0.01			Too sandy	0.01
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Not limited		Not limited		Not limited	
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Slope	0.50
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.16	Slope	0.16	Slow water movement	0.96
		Too sandy	0.13	Too sandy	0.13	Too sandy	0.13
Luverne	35	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.26	Slow water movement	0.26	Slope	1.00
		Slope	0.16	Slope	0.16	Slow water movement	0.26

Table 9a.—Recreational Development (Part 1)—Continued

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
FaA—Fluvaquents, ponded							
Fluvaquents	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Slow water movement	0.96	Ponding	1.00
		Slow water movement	0.96	Flooding	0.40	Slow water movement	0.96
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Gravel content	0.50	Gravel content	0.50	Gravel content	1.00
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too sandy	0.88	Too sandy	0.88	Gravel content	1.00
		Large stones	0.04	Large stones	0.04	Too sandy	0.88
		Gravel content	0.01	Gravel content	0.01	Large stones	0.04
Rock outcrop	30	Not rated		Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Not limited		Not limited		Not limited	
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Not limited		Not limited		Somewhat limited	
						Slope	0.13
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.26	Slow water movement	0.26	Slope	0.50
						Slow water movement	0.26
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.26	Slow water movement	0.26	Slope	1.00
		Slope	0.16	Slope	0.16	Slow water movement	0.26
Smithdale	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00

Table 9a.—Recreational Development (Part 1)—Continued

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
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Very limited		Somewhat limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40	Flooding	1.00
Iuka	30	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Kinston	25	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
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	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	0.39	Depth to saturated zone	0.19	Slope	0.88
						Depth to saturated zone	0.39
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Smithdale	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Boykin	20	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.95	Too sandy	0.95	Slope	1.00
		Slope	0.63	Slope	0.63	Too sandy	0.95
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 9a.—Recreational Development (Part 1)—Continued

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
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Smithdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MtA—Minter silty clay loam, ponded							
Minter	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Slow water movement	0.96	Ponding	1.00
		Slow water movement	0.96	Flooding	0.40	Slow water movement	0.96
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
						Slope	0.50
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.41	Gravel content	0.41	Slope	1.00
		Slope	0.37	Slope	0.37	Gravel content	1.00
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	0.50	Gravel content	0.50	Depth to bedrock	1.00
Townley	30	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
						Gravel content	0.50
						Depth to bedrock	0.10
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	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				
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Not limited		Not limited		Very limited	
						Slope	1.00

Table 9a.—Recreational Development (Part 1)—Continued

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
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Too sandy	0.50	Flooding	1.00
		Too sandy	0.50	Flooding	0.40	Too sandy	0.50
Riverview	30	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	1.00	Gravel content	1.00	Gravel content	1.00
Brilliant	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	1.00	Gravel content	1.00	Gravel content	1.00
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Not rated		Not rated	
Barfield	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Slow water movement	0.26	Slope	0.50
		Slow water movement	0.26	Depth to saturated zone	0.19	Depth to saturated zone	0.39
						Slow water movement	0.26
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 9a.—Recreational Development (Part 1)—Continued

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
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
						Depth to bedrock	0.20
Nauvoo	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Townley	15	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.37	Slope	0.37	Slow water movement	0.96
						Gravel content	0.50
						Depth to bedrock	0.10
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.20
Nauvoo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Sunlight	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.41	Gravel content	0.41	Gravel content	1.00
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.26	Slow water movement	0.26	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to bedrock	0.46
						Slow water movement	0.26
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
						Gravel content	0.50
						Slope	0.50
						Depth to bedrock	0.10

Table 9a.—Recreational Development (Part 1)—Continued

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
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Slope	0.37	Slope	0.37	Slow water movement	0.96
						Gravel content	0.50
						Depth to bedrock	0.10
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
Wadley	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.88	Too sandy	0.88	Too sandy	0.88
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.88	Too sandy	0.88	Too sandy	0.88
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Boykin	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
						Slope	0.13
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Too clayey	1.00	Too clayey	1.00	Slope	1.00
		Slope	0.16	Slope	0.16	Too clayey	1.00
Boswell	30	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slope	0.16	Slope	0.16	Slope	1.00

Table 9b.—Recreational Development (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. 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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	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
Iuka	35	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
						Depth to saturated zone	0.19
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Not limited		Not limited		Somewhat limited	
						Gravel content	0.99
						Slope	0.37
						Droughty	0.15
						Large stones	0.03
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Gravel content	0.99
						Droughty	0.15
						Large stones	0.03
Minvale	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Gravel content	0.41

Table 9b.—Recreational Development (Part 2)—Continued

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
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.99
						Droughty	0.15
						Large stones	0.03
Minvale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.41
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Not limited		Not limited		Somewhat limited	
						Flooding	0.60
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Not limited		Not limited		Somewhat limited	
						Flooding	0.60
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Not limited		Not limited		Not limited	
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Not limited		Not limited		Not limited	
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Not limited		Not limited		Not limited	
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.13	Too sandy	0.13	Slope	0.16
Luverne	35	Not limited		Not limited		Somewhat limited	
						Slope	0.16
FaA—Fluvaquents, ponded							
Fluvaquents	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Not limited		Not limited		Somewhat limited	
						Slope	0.63
						Gravel content	0.50

Table 9b.—Recreational Development (Part 2)—Continued

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
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.88	Too sandy	0.88	Depth to bedrock	1.00
		Large stones	0.04	Large stones	0.04	Droughty	1.00
						Gravel content	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Not limited		Not limited		Not limited	
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Not limited		Not limited		Not limited	
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Not limited		Not limited		Not limited	
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Not limited		Not limited		Somewhat limited	
						Slope	0.16
Smithdale	30	Not limited		Not limited		Somewhat limited	
						Slope	0.16
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
Smithdale	30	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.94
Iuka	30	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
						Depth to saturated zone	0.19
Kinston	25	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
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19

Table 9b.—Recreational Development (Part 2)—Continued

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
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Not limited		Not limited		Somewhat limited	
						Slope	0.63
						Depth to saturated zone	0.19
Smithdale	35	Not limited		Not limited		Somewhat limited	
						Slope	0.63
Boykin	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.95	Too sandy	0.95	Slope	0.63
						Droughty	0.26
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Somewhat limited		Not limited		Very limited	
		Slope	0.92			Slope	1.00
						Depth to saturated zone	0.19
Smithdale	30	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Smithdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MtA—Minter silty clay loam, ponded							
Minter	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Not limited		Not limited		Somewhat limited	
						Gravel content	0.41
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Not limited		Not limited		Somewhat limited	
						Gravel content	0.41
						Slope	0.37
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	0.50
Townley	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00	Slope	0.22	Depth to bedrock	0.10

Table 9b.—Recreational Development (Part 2)—Continued

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
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	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
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Not limited		Not limited		Not limited	
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.50	Too sandy	0.50	Flooding	1.00
		Flooding	0.40	Flooding	0.40		
Riverview	30	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.01	Slope	1.00
						Gravel content	1.00
						Droughty	0.69
						Large stones	0.01
Brilliant	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.01	Slope	1.00
						Gravel content	1.00
						Droughty	0.69
						Large stones	0.01
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Not limited		Not limited		Somewhat limited	
						Droughty	0.34
						Slope	0.01
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Not rated		Not rated	
Barfield	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	1.00
						Depth to bedrock	1.00
						Large stones	0.68
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Not limited		Not limited		Somewhat limited	
						Gravel content	0.41
						Slope	0.16
						Droughty	0.02

Table 9b.—Recreational Development (Part 2)—Continued

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
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Not limited		Not limited		Not limited	
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Not limited		Not limited		Somewhat limited	
						Slope	0.16
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Not limited		Not limited		Somewhat limited	
						Slope	0.63
						Depth to bedrock	0.20
Nauvoo	30	Not limited		Not limited		Somewhat limited	
						Slope	0.63
Townley	15	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.37
						Depth to bedrock	0.10
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Depth to bedrock	0.20
Nauvoo	30	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
Sunlight	20	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Droughty	1.00
						Depth to bedrock	1.00
						Gravel content	0.41
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.46
						Droughty	0.05
						Slope	0.04
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.10

Table 9b.—Recreational Development (Part 2)—Continued

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
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.37
						Depth to bedrock	0.10
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.95	Slope	1.00
		Too sandy	0.95			Droughty	0.26
Wadley	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.88	Slope	1.00
		Too sandy	0.88			Droughty	0.01
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.88	Too sandy	0.88	Slope	1.00
						Droughty	0.01
Smithdale	30	Not limited		Not limited		Very limited	
						Slope	1.00
Boykin	15	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.95	Too sandy	0.95	Slope	1.00
						Droughty	0.26
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
		Water erosion	1.00	Water erosion	1.00	Slope	0.16
Boswell	30	Not limited		Not limited		Somewhat limited	
						Slope	0.16

Table 10.—Wildlife Habitat

[See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable]

Map symbol and soil name	Potential for habitat elements							Potential to support habitat for—		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
AnA:										
Annemaine	Good	Good	Good	Good	Good	Good	Good	Good	Good	Poor
AnB:										
Annemaine	Good	Good	Good	Good	Good	Good	Good	Good	Good	Poor
BaA:										
Bama	Good	Good	Good		Good	Poor	Very poor	Good	Good	Very poor
BaB:										
Bama	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
BdA:										
Bibb	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Iuka	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor
BoD:										
Bodine	Poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
BvF:										
Bodine	Very poor	Poor	Poor	Fair	Fair	Very poor	Very poor	Poor	Poor	Very poor
Minvale	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
BvG:										
Bodine	Very poor	Very poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Minvale	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
CaA:										
Cahaba	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CaB:										
Cahaba	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CcA:										
Choccolocco	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CmA:										
Columbus	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
CoA:										
Colwell	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
CoB:										
Colwell	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
CuB:										
Conecuh	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
CvD2:										
Conecuh	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
Luverne	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor

Table 10.—Wildlife Habitat—Continued

Map symbol and soil name	Potential for habitat elements							Potential to support habitat for—		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
FaA:										
Fluvaquents	Very poor	Poor	Poor	Very poor	Very poor	Good	Good	Poor	Poor	Good
FuD:										
Fullerton	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
GrG:										
Gorgas	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
LdA:										
Lucedale	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
LdB:										
Lucedale	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
LnB:										
Luverne	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
LsD:										
Luverne	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Smithdale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
LsF:										
Luverne	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Smithdale	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MIA:										
Mantachie	Poor	Fair	Fair	Good	Fair	Fair	Fair	Fair	Good	Fair
Iuka	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor
Kinston	Poor	Poor	Poor	Fair	Poor	Good	Good	Poor	Good	Good
MkC2:										
Maubila	Poor	Fair	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MsD:										
Maubila	Fair	Fair	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Smithdale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Boykin	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MsF:										
Maubila	Poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Smithdale	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MsG:										
Maubila	Poor	Poor	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Smithdale	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 10.—Wildlife Habitat—Continued

Map symbol and soil name	Potential for habitat elements							Potential to support habitat for—		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
MtA:										
Minter	Very poor	Poor	Poor	Very poor	Very poor	Good	Good	Poor	Poor	Good
MvB:										
Minvale	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MvD:										
Minvale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MW:										
Water										
MwF:										
Montevallo	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Townley	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MyA:										
Myatt	Fair	Fair	Good	Good	Good	Fair	Fair	Good	Good	Fair
NaC:										
Nauvoo	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
ObB:										
Ochlockonee	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
Riverview	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
PBF:										
Palmerdale	Very poor	Poor	Poor	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Brilliant	Very poor	Poor	Poor	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Pt:										
Pits										
Udorthents										
Ql:										
Quarry, limestone										
RbG:										
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Barfield	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
SaD:										
Saffell	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
ShA:										
Savannah	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
ShB:										
Savannah	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Table 10.—Wildlife Habitat—Continued

Map symbol and soil name	Potential for habitat elements							Potential to support habitat for—		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
SmC:										
Smithdale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
SmD:										
Smithdale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
SnD:										
Sipsey	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Nauvoo	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Townley	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
SsF:										
Sipsey	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Nauvoo	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Sunlight	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
TaD:										
Talbott	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
ToB:										
Townley	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
ToD:										
Townley	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Ur:										
Urban Land										
W:										
Water										
WbF:										
Boykin	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Wadley	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
WdE:										
Wadley	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
Smithdale	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Boykin	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
WiB2:										
Wilcox	Fair	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor
WwD2:										
Wilcox	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Boswell	Fair	Fair	Good	Good		Very poor	Very poor	Fair	Good	Very poor

Table 11.—Hydric Soils

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria*
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded				
	Minter	1	Sloughs	2B3, 3
	Myatt	1	Stream terraces	2B3
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded				
	Minter	1	Sloughs	2B3, 3
	Myatt	1	Stream terraces	2B3
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded				
	Bibb	50	Flood plains	2B3
	Fluvaquents	3	Flood plains	2B3, 3
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony				
	Bibb	1	Flood plains	2B3
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony				
	Bibb	1	Flood plains	2B3
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony				
	Bibb	1	Flood plains	2B3
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded				
	Bibb	1	Flood plains	2B3
FaA—Fluvaquents, ponded				
	Fluvaquents	95	Flood plains	2B3, 3
	Bibb	1	Flood plains	2B3
	Kinston	1	Flood plains	2B3
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes				
	Bibb	2	Flood plains	2B3
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes				
	Bibb	3	Flood plains	2B3
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded				
	Kinston	25	Flood plains	2B3
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes				
	Bibb	2	Flood plains	2B3
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes				
	Bibb	1	Flood plains	2B3
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes				
	Bibb	1	Flood plains	2B3
MtA—Minter silty clay loam, ponded				
	Minter	95	Sloughs	2B3, 3
MwF—Montevallo-Townley complex, 15 to 35 percent slopes				
	Bibb	1	Flood plains	2B3
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded				
	Myatt	90	Stream terraces	2B3
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded				
	Minter	3	Sloughs	2B3, 3
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes				
	Bibb	1	Flood plains	2B3
SmD—Smithdale sandy loam, 5 to 15 percent slopes				
	Bibb	1	Flood plains	2B3

* See footnote at end of table.

Table 11.—Hydric Soils—Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria*
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes				
	Bibb	1	Flood plains	2B3
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes				
	Bibb	1	Flood plains	2B3
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery				
	Kinston	3	Flood plains	2B3
ToD—Townley silt loam, 6 to 15 percent slopes				
	Bibb	1	Flood plains	2B3
WbF—Wadley-Boykin complex, 15 to 35 percent slopes				
	Bibb	3	Flood plains	2B3
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes				
	Bibb	3	Flood plains	2B3
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded				
	Kinston	2	Flood plains	2B3

* The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

Table 12a.—Building Site Development (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. 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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	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
Iuka	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Minvale	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Minvale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.99		
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Not limited		Not limited		Not limited	
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Not limited		Not limited		Not limited	
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.16	Slope	0.16	Shrink-swell	0.50
Luverne	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
FaA—Fluvaquents, ponded							
Fluvaquents	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		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
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
				Shrink-swell	0.50		

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Rock outcrop	30	Not rated		Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Not limited		Not limited		Not limited	
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Not limited		Not limited		Not limited	
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Not limited		Not limited		Not limited	
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Smithdale	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Iuka	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Kinston	25	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	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
						Slope	0.13

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Shrink-swell	0.50	Slope	0.63	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
Smithdale	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Boykin	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		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
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		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
Smithdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
MtA—Minter silty clay loam, ponded							
Minter	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Not limited		Not limited		Not limited	
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
Townley	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to soft bedrock	0.10		
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	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
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Not limited		Not limited		Somewhat limited	
						Slope	0.50
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.61		
Riverview	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.61		
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Brilliant	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Slope	0.01	Slope	1.00
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Not rated		Not rated	
Barfield	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Shrink-swell	1.00	Depth to hard bedrock	1.00
		Shrink-swell	1.00	Depth to hard bedrock	1.00	Shrink-swell	1.00

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Not limited		Not limited		Somewhat limited	
						Slope	0.13
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
				Depth to soft bedrock	0.20		
Nauvoo	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Townley	15	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
				Depth to soft bedrock	0.10		
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Nauvoo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Sunlight	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00

Table 12a.—Building Site Development (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Somewhat limited		Very limited		Very limited	
		Shrink-swell	0.50	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Shrink-swell	0.50	Shrink-swell	0.50
		Slope	0.04	Slope	0.04	Depth to hard bedrock	0.46
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to soft bedrock	0.10		
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
				Depth to soft bedrock	0.10		
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Wadley	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Boykin	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
Boswell	30	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.16	Slope	0.16	Slope	1.00

Table 12b.—Building Site Development (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. 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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	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	0.10		
		Flooding	0.40				
		Depth to saturated zone	0.19				
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	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	0.10		
		Flooding	0.40				
		Depth to saturated zone	0.19				
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
				Flooding	0.80		
Iuka	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	0.19	Flooding	0.80	Depth to saturated zone	0.19
				Cutbanks cave	0.10		
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.37	Cutbanks cave	1.00	Gravel content	0.99
				Slope	0.37	Slope	0.37
						Droughty	0.15
						Large stones	0.03

Table 12b.—Building Site Development (Part 2)—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
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Gravel content	0.99
						Droughty	0.15
						Large stones	0.03
Minvale	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Gravel content	0.41
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Gravel content	0.99
						Droughty	0.15
						Large stones	0.03
Minvale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Gravel content	0.41
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Cutbanks cave	0.10		
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Cutbanks cave	0.10		
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Cutbanks cave	0.10		
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.99	Flooding	0.60
				Flooding	0.60		
				Cutbanks cave	0.10		
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.08	Too clayey	0.13		
				Cutbanks cave	0.10		
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.08	Too clayey	0.13		
				Cutbanks cave	0.10		

Table 12b.—Building Site Development (Part 2)—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
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.97		
		Shrink-swell	0.50	Cutbanks cave	0.10		
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.97	Slope	0.16
		Shrink-swell	0.50	Slope	0.16		
		Slope	0.16	Cutbanks cave	0.10		
Luverne	35	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.16	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10		
				Too clayey	0.03		
FaA—Fluvaquents, ponded							
Fluvaquents	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		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		
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
				Too clayey	0.88	Gravel content	0.50
				Slope	0.63		
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
				Cutbanks cave	0.10	Droughty	1.00
						Gravel content	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
				Too clayey	0.03		

Table 12b.—Building Site Development (Part 2)—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
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.16	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10		
				Too clayey	0.03		
Smithdale	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Slope	0.16	Slope	0.16
				Cutbanks cave	0.10		
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
				Too clayey	0.03		
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	0.94	Flooding	0.80	Depth to saturated zone	0.94
				Cutbanks cave	0.10		
Iuka	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	0.19	Flooding	0.80	Depth to saturated zone	0.19
				Cutbanks cave	0.10		
Kinston	25	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		
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	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	Too clayey	0.50		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		

Table 12b.—Building Site Development (Part 2)—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
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Slope	0.63
		Slope	0.63	Slope	0.63	Depth to saturated zone	0.19
		Shrink-swell	0.50	Too clayey	0.50		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
Smithdale	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
				Cutbanks cave	0.10		
Boykin	20	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
				Slope	0.63	Droughty	0.26
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Shrink-swell	0.50	Too clayey	0.50		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Shrink-swell	0.50	Too clayey	0.50		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
Smithdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
MtA—Minter silty clay loam, ponded							
Minter	95	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Too clayey	0.88	Depth to saturated zone	1.00
		Low strength	1.00	Flooding	0.80		
		Shrink-swell	0.50	Cutbanks cave	0.10		
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Gravel content	0.41

Table 12b.—Building Site Development (Part 2)—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
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.37	Cutbanks cave	1.00	Gravel content	0.41
				Slope	0.37	Slope	0.37
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
				Cutbanks cave	0.10	Droughty	1.00
						Gravel content	0.50
Townley	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28	Depth to bedrock	0.10
		Shrink-swell	0.50	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	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	0.40	Cutbanks cave	0.10		
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.78	Cutbanks cave	0.10		
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
				Flooding	0.80		
				Depth to saturated zone	0.61		
Riverview	30	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	0.78	Depth to saturated zone	0.61		
				Cutbanks cave	0.10		

Table 12b.—Building Site Development (Part 2)—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
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Gravel content	1.00
						Droughty	0.69
						Large stones	0.01
Brilliant	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Gravel content	1.00
						Droughty	0.69
						Large stones	0.01
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.01	Cutbanks cave	0.10	Droughty	0.34
				Slope	0.01	Slope	0.01
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Not rated		Not rated	
Barfield	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Low strength	1.00	Cutbanks cave	0.10	Depth to bedrock	1.00
		Shrink-swell	1.00			Large stones	0.68
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.16	Cutbanks cave	1.00	Gravel content	0.41
				Slope	0.16	Slope	0.16
						Droughty	0.02
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	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		
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	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		
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		

Table 12b.—Building Site Development (Part 2)—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
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Slope	0.16	Slope	0.16
				Cutbanks cave	0.10		
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Slope	0.63	Slope	0.63
		Slope	0.63	Depth to soft bedrock	0.20	Depth to bedrock	0.20
				Cutbanks cave	0.10		
Nauvoo	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Slope	0.63	Slope	0.63
		Slope	0.63	Cutbanks cave	0.10		
Townley	15	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.28	Depth to bedrock	0.10
		Slope	0.37	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Depth to soft bedrock	0.20	Depth to bedrock	0.20
				Cutbanks cave	0.10		
Nauvoo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
Sunlight	20	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Depth to bedrock	1.00
						Gravel content	0.41
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.46
		Shrink-swell	0.50	Too clayey	0.50	Droughty	0.05
		Depth to hard bedrock	0.46	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		

Table 12b.—Building Site Development (Part 2)—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
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.28	Depth to bedrock	0.10
		Shrink-swell	0.50	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.28	Depth to bedrock	0.10
		Slope	0.37	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.26
Wadley	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.01
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.01
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Boykin	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.26
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Very limited		Very limited		Very limited	
		Low strength	1.00	Too clayey	1.00	Too clayey	1.00
		Shrink-swell	1.00	Cutbanks cave	1.00		
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Too clayey	1.00	Too clayey	1.00
		Shrink-swell	1.00	Cutbanks cave	1.00	Slope	0.16
		Slope	0.16	Slope	0.16		
Boswell	30	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.41	Slope	0.16
		Shrink-swell	1.00	Slope	0.16		
		Slope	0.16	Cutbanks cave	0.10		

Table 13a.—Sanitary Facilities (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded					
Annemaine	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40	Seepage	0.32
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded					
Annemaine	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40	Seepage	0.32
				Slope	0.08
BaA—Bama fine sandy loam, 0 to 2 percent slopes					
Bama	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
BaB—Bama fine sandy loam, 2 to 5 percent slopes					
Bama	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded					
Bibb	50	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
Iuka	35	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	1.00
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony					
Bodine	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.37	Slope	1.00
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony					
Bodine	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Minvale	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony					
Bodine	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Minvale	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded					
Cahaba	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Flooding	0.40
		Flooding	0.40		
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded					
Cahaba	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Flooding	0.40
		Flooding	0.40	Slope	0.08
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded					
Choccolocco	80	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded					
Columbus	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
CoA—Colwell sandy loam, 0 to 2 percent slopes					
Colwell	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
CoB—Colwell sandy loam, 2 to 5 percent slopes					
Colwell	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
CuB—Conecuh sandy loam, 2 to 5 percent slopes					
Conecuh	80	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.32
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded					
Conecuh	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16		
Luverne	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16		

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
FaA—Fluvaquents, ponded					
Fluvaquents	95	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes					
Fullerton	80	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes					
Gorgas	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Rock outcrop	30	Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes					
Lucedale	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
LdB—Lucedale sandy loam, 2 to 5 percent slopes					
Lucedale	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.08
LnB—Luverne sandy loam, 2 to 5 percent slopes					
Luverne	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.32
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes					
Luverne	60	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16		
Smithdale	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
		Slope	0.16		
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes					
Luverne	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00		
Smithdale	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded					
Mantachie	35	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
Iuka	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	1.00
Kinston	25	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded					
Maubila	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes					
Maubila	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slope	0.63		
Smithdale	35	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.50		
Boykin	20	Somewhat limited		Very limited	
		Slope	0.63	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes					
Maubila	60	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slope	1.00		
Smithdale	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes					
Maubila	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slope	1.00		
Smithdale	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
MtA—Minter silty clay loam, ponded					
Minter	95	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes					
Minvale	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes					
Minvale	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
		Slope	0.37	Seepage	0.50
MW—Miscellaneous water					
Water	100	Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes					
Montevallo	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Townley	30	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00		
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded					
Myatt	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.68	Flooding	0.40
		Flooding	0.40	Seepage	0.32
NaC—Nauvoo sandy loam, 2 to 8 percent slopes					
Nauvoo	80	Somewhat limited		Somewhat limited	
		Depth to bedrock	0.52	Slope	0.92
		Slow water movement	0.50	Seepage	0.50
				Depth to soft bedrock	0.08
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded					
Ochlockonee	60	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50		
Riverview	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50		

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes					
Palmerdale	50	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	1.00
Brilliant	40	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	1.00
Pt—Pits-Udorthents complex					
Pits	70	Not rated		Not rated	
Udorthents	25	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.01		
Ql—Quarry, limestone					
Quarry, limestone	95	Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes					
Rock outcrop	45	Not rated		Not rated	
Barfield	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes					
Saffell	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
		Slope	0.16		
ShA—Savannah silt loam, 0 to 2 percent slopes					
Savannah	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
ShB—Savannah silt loam, 2 to 5 percent slopes					
Savannah	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
SmC—Smithdale sandy loam, 2 to 8 percent slopes					
Smithdale	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.68
SmD—Smithdale sandy loam, 5 to 15 percent slopes					
Smithdale	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
		Slope	0.16		

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes					
Sipsey	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.63	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
Nauvoo	30	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Depth to bedrock	0.52	Seepage	0.50
		Slow water movement	0.50	Depth to soft bedrock	0.08
Townley	15	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.37		
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes					
Sipsey	40	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
Nauvoo	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.52	Seepage	0.50
		Slow water movement	0.50	Depth to soft bedrock	0.08
Sunlight	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery					
Talbott	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.04		
ToB—Townley silt loam, 2 to 6 percent slopes					
Townley	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	0.32
ToD—Townley silt loam, 6 to 15 percent slopes					
Townley	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.37		
Ur—Urban land					
Urban land	95	Not rated		Not rated	
W—Water					
Water	100	Not rated		Not rated	

Table 13a.—Sanitary Facilities (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
WbF—Wadley-Boykin complex, 15 to 35 percent slopes					
Boykin	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
Wadley	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes					
Wadley	45	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
Smithdale	30	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.50		
Boykin	15	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded					
Wilcox	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to soft bedrock	0.77
		Depth to bedrock	0.91	Slope	0.08
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded					
Wilcox	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to bedrock	0.91	Depth to soft bedrock	0.77
		Slope	0.16		
Boswell	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.16		

Table 13b.—Sanitary Facilities (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. See text for further explanation of ratings in this table]

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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Flooding	0.40	Flooding	0.40	Too clayey	0.50
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Flooding	0.40	Flooding	0.40	Too clayey	0.50
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Not limited		Not limited		Not limited	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	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		
Iuka	35	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.86
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Very limited		Very limited		Somewhat limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Gravel content	0.99
		Slope	0.37	Slope	0.37	Seepage	0.50
						Slope	0.37
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Gravel content	0.99
						Seepage	0.50
Minvale	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
						Gravel content	0.41

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Gravel content	0.99
						Seepage	0.50
Minvale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
						Gravel content	0.41
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Very limited	
		Seepage, bottom layer	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40				
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Very limited	
		Seepage, bottom layer	1.00	Flooding	0.40	Seepage	1.00
		Flooding	0.40				
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Too clayey	0.50
		Seepage, bottom layer	1.00				
		Too clayey	0.50				
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.47
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.16	Too clayey	1.00
		Slope	0.16			Hard to compact	1.00
						Slope	0.16
Luverne	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.16	Too clayey	0.50
		Slope	0.16			Slope	0.16
FaA—Fluvaquents, ponded							
Fluvaquents	95	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00		
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
		Too clayey	0.50			Too clayey	0.50
						Gravel content	0.50
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Seepage	0.50
Rock outcrop	30	Not rated		Very limited		Not rated	
				Slope	1.00		
				Depth to bedrock	1.00		
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Not limited		Not limited		Not limited	
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Not limited		Not limited		Not limited	
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.16	Too clayey	0.50
		Slope	0.16			Slope	0.16
Smithdale	30	Very limited		Somewhat limited		Somewhat limited	
		Seepage, bottom layer	1.00	Slope	0.16	Seepage	0.50
		Slope	0.16			Slope	0.16

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Seepage	0.50
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
Iuka	30	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.86
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
Kinston	25	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Very limited		Very limited		Very limited	
		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
						Depth to saturated zone	0.86
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Depth to saturated zone	0.75	Too clayey	1.00
		Depth to saturated zone	0.99	Slope	0.63	Hard to compact	1.00
		Slope	0.63			Depth to saturated zone	0.86
						Slope	0.63
Smithdale	35	Very limited		Somewhat limited		Somewhat limited	
		Seepage, bottom layer	1.00	Slope	0.63	Slope	0.63
		Slope	0.63			Seepage	0.50
Boykin	20	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Seepage	1.00	Slope	0.63
				Slope	0.63		

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00	Depth to saturated zone	0.75	Too clayey	1.00
		Depth to saturated zone	0.99			Hard to compact	1.00
						Depth to saturated zone	0.86
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Seepage	0.50
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00	Depth to saturated zone	0.75	Too clayey	1.00
		Depth to saturated zone	0.99			Hard to compact	1.00
						Depth to saturated zone	0.86
Smithdale	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Seepage	0.50
MtA—Minter silty clay loam, ponded							
Minter	95	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
						Gravel content	0.41
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Gravel content	0.41
						Slope	0.37
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
						Gravel content	1.00
Townley	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	1.00
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	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	0.40	Flooding	0.40		
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Depth to bedrock	0.08	Too clayey	0.50
		Too clayey	0.50			Depth to bedrock	0.08
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Seepage	0.50
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	0.50
		Seepage, bottom layer	1.00	Seepage	1.00		
		Too sandy	0.50				
Riverview	30	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Seepage	0.50
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Seepage, bottom layer	1.00	Seepage	1.00		
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Slope	1.00
						Seepage	0.50
Brilliant	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Slope	1.00
						Seepage	0.50

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Very limited		Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Slope	0.01	Slope	0.01	Slope	0.01
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Very limited		Not rated	
				Slope	1.00		
				Depth to bedrock	1.00		
Barfield	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Very limited		Somewhat limited		Very limited	
		Seepage, bottom layer	1.00	Slope	0.16	Gravel content	1.00
		Slope	0.16			Seepage	0.21
						Slope	0.16
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Very limited		Not limited		Somewhat limited	
		Seepage, bottom layer	1.00			Seepage	0.50
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Very limited		Somewhat limited		Somewhat limited	
		Seepage, bottom layer	1.00	Slope	0.16	Seepage	0.50
		Slope	0.16			Slope	0.16

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63	Slope	0.63
Nauvoo	30	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Slope	0.63	Slope	0.63
		Slope	0.63	Depth to bedrock	0.08	Too clayey	0.50
		Too clayey	0.50			Depth to bedrock	0.08
Townley	15	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Slope	0.37			Depth to bedrock	1.00
						Slope	0.37
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Nauvoo	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.08	Too clayey	0.50
		Too clayey	0.50			Depth to bedrock	0.08
Sunlight	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
						Gravel content	0.99
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.04	Hard to compact	1.00
		Slope	0.04			Depth to bedrock	1.00
						Slope	0.04
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	1.00
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Slope	0.37			Depth to bedrock	1.00
						Slope	0.37
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	

Table 13b.—Sanitary Facilities (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Seepage	1.00		
Wadley	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.50	Seepage	1.00	Too sandy	0.50
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Slope	1.00
		Too sandy	0.50	Slope	1.00	Too sandy	0.50
Smithdale	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Seepage	0.50
Boykin	15	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Slope	1.00
				Slope	1.00		
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.77	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	0.77
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.77	Too clayey	1.00
		Too clayey	1.00	Slope	0.16	Hard to compact	1.00
		Slope	0.16			Depth to bedrock	0.77
						Slope	0.16
Boswell	30	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.16	Too clayey	1.00
		Slope	0.16			Hard to compact	1.00
						Slope	0.16

Table 14a.—Construction Materials (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The larger 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 as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded					
Annemaine	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded					
Annemaine	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
BaA—Bama fine sandy loam, 0 to 2 percent slopes					
Bama	95	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
BaB—Bama fine sandy loam, 2 to 5 percent slopes					
Bama	95	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.02
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded					
Bibb	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.09
Iuka	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.02
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony					
Bodine	80	Fair		Poor	
		Thickest layer	0.13	Bottom layer	0.00
		Bottom layer	0.13	Thickest layer	0.00
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony					
Bodine	50	Fair		Poor	
		Thickest layer	0.13	Bottom layer	0.00
		Bottom layer	0.13	Thickest layer	0.00
Minvale	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony					
Bodine	60	Fair		Poor	
		Thickest layer	0.13	Bottom layer	0.00
		Bottom layer	0.13	Thickest layer	0.00
Minvale	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded					
Cahaba	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.07
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded					
Cahaba	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.07
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded					
Choccolocco	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.06
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded					
Columbus	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CoA—Colwell sandy loam, 0 to 2 percent slopes					
Colwell	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
CoB—Colwell sandy loam, 2 to 5 percent slopes					
Colwell	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
CuB—Conecuh sandy loam, 2 to 5 percent slopes					
Conecuh	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded					
Conecuh	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Luverne	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
FaA—Fluvaquents, ponded					
Fluvaquents	95	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes					
Fullerton	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes					
Gorgas	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Rock outcrop	30	Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes					
Lucedale	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
LdB—Lucedale sandy loam, 2 to 5 percent slopes					
Lucedale	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
LnB—Luverne sandy loam, 2 to 5 percent slopes					
Luverne	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes					
Luverne	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smithdale	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes					
Luverne	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smithdale	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded					
Mantachie	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Iuka	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.02
Kinston	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded					
Maubila	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes					
Maubila	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smithdale	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Boykin	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes					
Maubila	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smithdale	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes					
Maubila	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Smithdale	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
MtA—Minter silty clay loam, ponded					
Minter	95	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes					
Minvale	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes					
Minvale	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
MW—Miscellaneous water					
Water	100	Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes					
Montevallo	50	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Townley	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded					
Myatt	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
NaC—Nauvoo sandy loam, 2 to 8 percent slopes					
Nauvoo	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded					
Ochlockonee	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.12
Riverview	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes					
Palmerdale	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Brilliant	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pt—Pits-Udorthents complex					
Pits	70	Not rated		Not rated	
Udorthents	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.07
		Thickest layer	0.00	Thickest layer	0.07
Ql—Quarry, limestone					
Quarry, limestone	95	Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes					
Rock outcrop	45	Not rated		Not rated	
Barfield	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes					
Saffell	85	Fair		Fair	
		Bottom layer	0.06	Thickest layer	0.00
		Thickest layer	0.25	Bottom layer	0.04
ShA—Savannah silt loam, 0 to 2 percent slopes					
Savannah	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
ShB—Savannah silt loam, 2 to 5 percent slopes					
Savannah	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
SmC—Smithdale sandy loam, 2 to 8 percent slopes					
Smithdale	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
SmD—Smithdale sandy loam, 5 to 15 percent slopes					
Smithdale	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes					
Sipsey	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nauvoo	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Townley	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes					
Sipsey	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nauvoo	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Sunlight	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery					
Talbott	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
ToB—Townley silt loam, 2 to 6 percent slopes					
Townley	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
ToD—Townley silt loam, 6 to 15 percent slopes					
Townley	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ur—Urban land					
Urban land	95	Not rated		Not rated	
W—Water					
Water	100	Not rated		Not rated	

Table 14a.—Construction Materials (Part 1)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of gravel		Potential as a source of sand	
		Rating class	Value	Rating class	Value
WbF—Wadley-Boykin complex, 15 to 35 percent slopes					
Boykin	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Wadley	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.10
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes					
Wadley	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.10
Smithdale	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Boykin	15	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded					
Wilcox	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded					
Wilcox	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Boswell	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14b.—Construction Materials (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.32	Shrink-swell	0.99	Too acid	0.88
		Water erosion	0.99				
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.32	Shrink-swell	0.99	Too acid	0.88
		Water erosion	0.99				
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.88
		Too acid	0.32				
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.88
		Too acid	0.32				
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	Fair		Poor		Poor	
		Too acid	0.12	Depth to wetness	0.00	Depth to wetness	0.00
		Low content of organic matter	0.88			Rock fragments	0.13
		Water erosion	0.99			Too acid	0.59
Iuka	35	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.32			Too acid	0.88
		Too sandy	0.99			Too sandy	0.99
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Fair		Fair		Poor	
		Too acid	0.12	Cobble content	0.99	Rock fragments	0.00
		Low content of organic matter	0.13			Hard to reclaim (rock fragments)	0.00
						Too acid	0.59
						Slope	0.63

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Fair		Poor		Poor	
		Too acid	0.12	Slope	0.00	Slope	0.00
		Low content of organic matter	0.13	Cobble content	0.99	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.00
						Too acid	0.59
Minvale	40	Fair		Poor		Poor	
		Low content of organic matter	0.13	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.00
		Too clayey	0.50			Too clayey	0.29
						Hard to reclaim (rock fragments)	0.50
						Too acid	0.88
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Fair		Poor		Poor	
		Too acid	0.12	Slope	0.00	Slope	0.00
		Low content of organic matter	0.13	Cobble content	0.99	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.00
						Too acid	0.59
Minvale	30	Fair		Poor		Poor	
		Low content of organic matter	0.13	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.00
		Too clayey	0.50			Too clayey	0.29
						Hard to reclaim (rock fragments)	0.50
						Too acid	0.88
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.98
		Too acid	0.54				
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.98
		Too acid	0.54				
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Fair		Poor		Fair	
		Low content of organic matter	0.02	Low strength	0.00	Too acid	0.98
		Too acid	0.54				
		Water erosion	0.99				

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Fair		Poor		Fair	
		Low content of organic matter	0.13	Low strength	0.00	Too acid	0.88
		Too acid	0.32	Depth to wetness	0.89	Depth to wetness	0.89
		Water erosion	0.99				
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.22	Too clayey	0.00
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.54				
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.22	Too clayey	0.00
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.54				
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.62	Too acid	0.59
		Low content of organic matter	0.88				
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.62	Too acid	0.59
		Low content of organic matter	0.88			Slope	0.84
Luverne	35	Fair		Good		Fair	
		Too acid	0.12			Too acid	0.59
		Low content of organic matter	0.13			Slope	0.84
FaA—Fluvaquents, ponded							
Fluvaquents	95	Fair		Poor		Poor	
		Too acid	0.50	Depth to wetness	0.00	Depth to wetness	0.00
		Low content of organic matter	0.88	Low strength	0.00	Too acid	0.59
		Water erosion	0.99				

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Poor		Fair		Poor	
		Low content of organic matter	0.00	Low strength	0.10	Rock fragments	0.00
		Too acid	0.32	Shrink-swell	0.99	Slope	0.37
						Hard to reclaim (rock fragments)	0.50
						Too acid	0.88
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.13			Rock fragments	0.28
		Too acid	0.50			Too acid	0.88
Rock outcrop	30	Not rated		Not rated		Not rated	
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.88
		Too acid	0.32				
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.88
		Too acid	0.32				
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Fair		Good		Fair	
		Too acid	0.12			Too acid	0.59
		Low content of organic matter	0.13				
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Fair		Good		Fair	
		Too acid	0.12			Too acid	0.59
		Low content of organic matter	0.13			Slope	0.84
Smithdale	30	Poor		Good		Fair	
		Low content of organic matter	0.00			Slope	0.84
		Too acid	0.32			Too acid	0.88

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Fair		Poor		Poor	
		Too acid	0.12	Slope	0.00	Slope	0.00
		Low content of organic matter	0.13			Too acid	0.59
Smithdale	30	Poor		Poor		Poor	
		Low content of organic matter	0.00	Slope	0.00	Slope	0.00
		Too acid	0.32			Too acid	0.88
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.04	Depth to wetness	0.04
		Too acid	0.50			Too acid	0.88
		Water erosion	0.99				
Iuka	30	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.32			Too acid	0.88
		Too sandy	0.99			Too sandy	0.99
Kinston	25	Fair		Poor		Poor	
		Too acid	0.50	Depth to wetness	0.00	Depth to wetness	0.00
				Low strength	0.00	Too acid	0.88
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Poor		Fair		Poor	
		Low content of organic matter	0.00	Depth to wetness	0.53	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.87	Depth to wetness	0.53
		Too acid	0.12			Too acid	0.59
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Poor		Fair		Poor	
		Low content of organic matter	0.00	Depth to wetness	0.53	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.87	Slope	0.37
		Too acid	0.12			Depth to wetness	0.53
						Too acid	0.59
Smithdale	35	Poor		Good		Fair	
		Low content of organic matter	0.00			Slope	0.37
		Too acid	0.32			Too acid	0.88
Boykin	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.37
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.50				

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Poor		Fair		Poor	
		Low content of organic matter	0.00	Slope	0.08	Slope	0.00
		Too clayey	0.00	Depth to wetness	0.53	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.87	Depth to wetness	0.53
						Too acid	0.59
Smithdale	30	Poor		Poor		Poor	
		Low content of organic matter	0.00	Slope	0.00	Slope	0.00
		Too acid	0.32			Too acid	0.88
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Poor		Poor		Poor	
		Low content of organic matter	0.00	Slope	0.00	Slope	0.00
		Too clayey	0.00	Depth to wetness	0.53	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.87	Depth to wetness	0.53
						Too acid	0.59
Smithdale	35	Poor		Poor		Poor	
		Low content of organic matter	0.00	Slope	0.00	Slope	0.00
		Too acid	0.32			Too acid	0.88
MtA—Minter silty clay loam, ponded							
Minter	95	Poor		Poor		Poor	
		Too clayey	0.00	Depth to wetness	0.00	Depth to wetness	0.00
		Low content of organic matter	0.18	Low strength	0.00	Too clayey	0.00
		Too acid	0.32	Shrink-swell	0.87	Too acid	0.88
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Fair		Good		Poor	
		Low content of organic matter	0.13			Rock fragments	0.00
		Too acid	0.50			Too clayey	0.29
		Too clayey	0.50			Hard to reclaim (rock fragments)	0.50
						Too acid	0.88
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Fair		Good		Poor	
		Low content of organic matter	0.13			Rock fragments	0.00
		Too acid	0.50			Too clayey	0.29
		Too clayey	0.50			Hard to reclaim (rock fragments)	0.50
						Slope	0.63
						Too acid	0.88
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.13			Depth to bedrock	0.00
		Too acid	0.54			Too acid	0.98
Townley	30	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Low content of organic matter	0.13	Slope	0.00	Too clayey	0.00
		Too acid	0.50	Low strength	0.00	Rock fragments	0.50
		Droughty	0.82	Shrink-swell	0.91	Too acid	0.59
		Depth to bedrock	0.90			Depth to bedrock	0.90
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	90	Poor		Poor		Poor	
		Low content of organic matter	0.00	Depth to wetness	0.00	Depth to wetness	0.00
		Too acid	0.50			Too acid	0.59
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Fair		Fair		Fair	
		Low content of organic matter	0.13	Low strength	0.22	Too clayey	0.29
		Too clayey	0.50	Depth to bedrock	0.92	Too acid	0.98
		Too acid	0.54				
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.88
		Too acid	0.50				
		Low content of organic matter	0.88				
Riverview	30	Fair		Good		Fair	
		Too acid	0.54			Too acid	0.98
		Low content of organic matter	0.88				

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Poor		Poor		Poor	
		Low content of organic matter	0.00	Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Slope	0.00
		Droughty	0.98			Hard to reclaim (rock fragments)	0.00
						Too acid	0.59
Brilliant	40	Fair		Poor		Poor	
		Low content of organic matter	0.13	Slope	0.00	Rock fragments	0.00
		Droughty	0.98			Slope	0.00
						Hard to reclaim (rock fragments)	0.00
Pt—Pits-Udorthents complex							
Pits	70	Not rated		Not rated		Not rated	
Udorthents	25	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.98
		Too acid	0.54				
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Not rated		Poor		Not rated	
				Depth to bedrock	0.00		
				Slope	0.00		
				Stone content	0.00		
Barfield	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Low strength	0.00	Depth to bedrock	0.00
		Too clayey	0.00	Slope	0.00	Too clayey	0.00
		Low content of organic matter	0.13	Shrink-swell	0.12	Rock fragments	0.25
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Fair		Good		Poor	
		Low content of organic matter	0.13			Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
						Slope	0.84
						Too acid	0.88
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.12			Too acid	0.59

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Poor		Fair		Fair	
		Low content of organic matter	0.00	Depth to wetness	0.53	Depth to wetness	0.53
		Too acid	0.12			Too acid	0.59
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Poor		Good		Fair	
		Low content of organic matter	0.00			Too acid	0.88
		Too acid	0.32				
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Poor		Good		Fair	
		Low content of organic matter	0.00			Slope	0.84
		Too acid	0.32			Too acid	0.88
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Fair		Poor		Fair	
		Too acid	0.54	Depth to bedrock	0.00	Slope	0.37
		Depth to bedrock	0.79	Low strength	0.22	Depth to bedrock	0.79
		Low content of organic matter	0.88			Too acid	0.98
		Droughty	0.92				
Nauvoo	30	Fair		Fair		Fair	
		Low content of organic matter	0.13	Low strength	0.22	Too clayey	0.29
		Too clayey	0.50	Depth to bedrock	0.92	Slope	0.37
		Too acid	0.54			Too acid	0.98
Townley	15	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.13	Low strength	0.00	Rock fragments	0.50
		Too acid	0.50	Shrink-swell	0.91	Too acid	0.59
		Droughty	0.82			Slope	0.63
		Depth to bedrock	0.90			Depth to bedrock	0.90

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Fair		Poor		Poor	
		Too acid	0.54	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.79	Slope	0.00	Depth to bedrock	0.79
		Low content of organic matter	0.88	Low strength	0.22	Too acid	0.98
		Droughty	0.92				
Nauvoo	30	Fair		Poor		Poor	
		Low content of organic matter	0.13	Slope	0.00	Slope	0.00
		Too clayey	0.50	Low strength	0.22	Too clayey	0.29
		Too acid	0.54	Depth to bedrock	0.92	Too acid	0.98
Sunlight	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too acid	0.54			Rock fragments	0.00
		No organic matter limitation	1.00			Too acid	0.98
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Droughty	0.11	Depth to bedrock	0.00	Depth to bedrock	0.54
		Low content of organic matter	0.13	Shrink-swell	0.87	Slope	0.96
		Depth to bedrock	0.54				
		Too acid	0.84				
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.13	Low strength	0.00	Rock fragments	0.50
		Too acid	0.50	Shrink-swell	0.91	Too acid	0.59
		Droughty	0.82			Depth to bedrock	0.90
		Depth to bedrock	0.90				
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.13	Low strength	0.00	Rock fragments	0.50
		Too acid	0.50	Shrink-swell	0.91	Too acid	0.59
		Droughty	0.82			Slope	0.63
		Depth to bedrock	0.90			Depth to bedrock	0.90
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.50				
Wadley	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.54			Too acid	0.98
		Low content of organic matter	0.88				
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Too acid	0.54			Too acid	0.98
		Low content of organic matter	0.88				
Smithdale	30	Poor		Good		Poor	
		Low content of organic matter	0.00			Slope	0.00
		Too acid	0.32			Too acid	0.88
Boykin	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.50				
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.12	Too acid	0.59
		Low content of organic matter	0.50	Depth to bedrock	0.23		
		Water erosion	0.99				

Table 14b.—Construction Materials (Part 2)—Continued

Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.12	Too acid	0.59
		Low content of organic matter	0.50	Depth to bedrock	0.23	Slope	0.84
		Water erosion	0.99				
Boswell	30	Poor		Poor		Poor	
		Low content of organic matter	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.12	Slope	0.84
		Too acid	0.32			Too acid	0.88

Table 15.—Water Management

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows no more than five limitations for any given soil. The soil may have additional limitations. 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
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded							
Annemaine	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.57	Depth to saturated zone	0.99	Slow refill	0.43
				Piping	0.86	Cutbanks cave	0.10
				Seepage	0.01	Depth to saturated zone	0.01
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded							
Annemaine	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.57	Depth to saturated zone	0.99	Slow refill	0.43
				Piping	0.86	Cutbanks cave	0.10
				Seepage	0.01	Depth to saturated zone	0.01
BaA—Bama fine sandy loam, 0 to 2 percent slopes							
Bama	95	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
				Seepage	0.05		
BaB—Bama fine sandy loam, 2 to 5 percent slopes							
Bama	95	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
		Slope	0.08	Seepage	0.02		
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded							
Bibb	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Piping	1.00	Slow refill	0.30
				Seepage	0.09		
Iuka	35	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.99	Slow refill	0.30
				Seepage	0.02	Cutbanks cave	0.10
						Depth to saturated zone	0.01
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony							
Bodine	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
		Slope	1.00				

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony							
Bodine	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
		Slope	1.00				
Minvale	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.76	Depth to water	1.00
		Seepage	0.70				
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony							
Bodine	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.13	Depth to water	1.00
		Slope	1.00				
Minvale	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.76	Depth to water	1.00
		Seepage	0.70				
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.07	Depth to water	1.00
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded							
Cahaba	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.07	Depth to water	1.00
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded							
Choccolocco	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.06		
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded							
Columbus	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.86	Slow refill	0.30
				Piping	0.75	Cutbanks cave	0.10
						Depth to saturated zone	0.06
CoA—Colwell sandy loam, 0 to 2 percent slopes							
Colwell	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.44	Depth to water	1.00
				Seepage	0.05		
CoB—Colwell sandy loam, 2 to 5 percent slopes							
Colwell	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.44	Depth to water	1.00
		Slope	0.08	Seepage	0.05		

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CuB—Conecuh sandy loam, 2 to 5 percent slopes							
Conecuh	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.08	Hard to pack	0.86	Depth to water	1.00
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded							
Conecuh	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.86	Depth to water	1.00
Luverne	35	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.03				
FaA—Fluvaquents, ponded							
Fluvaquents	95	Not limited		Very limited		Somewhat limited	
				Ponding	1.00	Cutbanks cave	0.10
				Depth to saturated zone	1.00		
				Seepage	0.03		
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes							
Fullerton	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.08	Depth to water	1.00
		Seepage	0.70				
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes							
Gorgas	50	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Seepage	0.04		
Rock outcrop	30	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				
LdA—Lucedale sandy loam, 0 to 2 percent slopes							
Lucedale	95	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
LdB—Lucedale sandy loam, 2 to 5 percent slopes							
Lucedale	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
LnB—Luverne sandy loam, 2 to 5 percent slopes							
Luverne	85	Somewhat limited		Not limited		Very limited	
		Slope	0.08			Depth to water	1.00
		Seepage	0.03				
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes							
Luverne	60	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.03				
Smithdale	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes							
Luverne	60	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.03				
Smithdale	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded							
Mantachie	35	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
				Piping	1.00	Cutbanks cave	0.10
				Seepage	0.03		
Iuka	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.99	Slow refill	0.30
				Seepage	0.02	Cutbanks cave	0.10
						Depth to saturated zone	0.01
Kinston	25	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.63		
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded							
Maubila	85	Somewhat limited		Very limited		Very limited	
		Slope	0.32	Depth to saturated zone	0.99	Slow refill	1.00
		Seepage	0.03			Depth to saturated zone	0.14
						Cutbanks cave	0.10
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes							
Maubila	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.03				
Smithdale	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
Boykin	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.05	Depth to water	1.00
		Slope	1.00				

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes							
Maubila	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.03				
Smithdale	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes							
Maubila	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.03				
Smithdale	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
MtA—Minter silty clay loam, ponded							
Minter	95	Not limited		Very limited		Very limited	
				Ponding	1.00	Slow refill	1.00
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Seepage	0.01		
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes							
Minvale	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.76	Depth to water	1.00
		Slope	0.08				
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes							
Minvale	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.76	Depth to water	1.00
		Seepage	0.70				
MW—Miscellaneous water							
Water	100	Not rated		Not rated		Not rated	
MwF—Montevallo-Townley complex, 15 to 35 percent slopes							
Montevallo	50	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	0.61				
Townley	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.70	Depth to water	1.00
		Depth to bedrock	0.04				
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded							
Myatt	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.57	Depth to saturated zone	1.00	Slow refill	0.43
				Piping	0.93	Cutbanks cave	0.10

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
NaC—Nauvoo sandy loam, 2 to 8 percent slopes							
Nauvoo	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.95	Depth to water	1.00
		Slope	0.68	Thin layer	0.02		
		Depth to bedrock	0.01				
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded							
Ochlockonee	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.12	Cutbanks cave	1.00
						Depth to saturated zone	0.81
Riverview	30	Very limited		Not limited		Somewhat limited	
		Seepage	1.00			Depth to saturated zone	0.81
						Cutbanks cave	0.10
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes							
Palmerdale	50	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	1.00				
Brilliant	40	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	1.00				
Pt—Pits-Udorthents complex							
Pits	70	Very limited		Not rated		Not rated	
		Slope	1.00				
Udorthents	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.07	Depth to water	1.00
		Slope	1.00				
Ql—Quarry, limestone							
Quarry, limestone	95	Not rated		Not rated		Not rated	
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes							
Rock outcrop	45	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				
Barfield	35	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Hard to pack	0.29		
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes							
Saffell	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.25	Depth to water	1.00
		Seepage	1.00				
ShA—Savannah silt loam, 0 to 2 percent slopes							
Savannah	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.99	Slow refill	0.97
				Piping	0.92	Cutbanks cave	0.10

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						Depth to saturated zone	0.02
ShB—Savannah silt loam, 2 to 5 percent slopes							
Savannah	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	0.99	Slow refill	0.97
		Slope	0.08	Piping	0.92	Cutbanks cave	0.10
						Depth to saturated zone	0.02
SmC—Smithdale sandy loam, 2 to 8 percent slopes							
Smithdale	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.32	Seepage	0.01		
SmD—Smithdale sandy loam, 5 to 15 percent slopes							
Smithdale	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes							
Sipsey	45	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	0.99	Depth to water	1.00
		Seepage	0.70	Thin layer	0.77		
		Depth to bedrock	0.06				
Nauvoo	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.95	Depth to water	1.00
		Seepage	0.70	Thin layer	0.02		
		Depth to bedrock	0.01				
Townley	15	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.70	Depth to water	1.00
		Depth to bedrock	0.04				
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes							
Sipsey	40	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	0.99	Depth to water	1.00
		Seepage	0.70	Thin layer	0.77		
		Depth to bedrock	0.06				
Nauvoo	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.95	Depth to water	1.00
		Seepage	0.70	Thin layer	0.02		
		Depth to bedrock	0.01				
Sunlight	20	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	0.78	Seepage	0.01		

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery							
Talbott	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86	Hard to pack	0.35		
		Seepage	0.03				
ToB—Townley silt loam, 2 to 6 percent slopes							
Townley	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.08	Thin layer	0.70	Depth to water	1.00
		Depth to bedrock	0.04				
ToD—Townley silt loam, 6 to 15 percent slopes							
Townley	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.70	Depth to water	1.00
		Depth to bedrock	0.04				
Ur—Urban land							
Urban land	95	Not rated		Not rated		Not rated	
W—Water							
Water	100	Not rated		Not rated		Not rated	
WbF—Wadley-Boykin complex, 15 to 35 percent slopes							
Boykin	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.05	Depth to water	1.00
		Slope	1.00				
Wadley	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	1.00				
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes							
Wadley	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	1.00				
Smithdale	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.01		
Boykin	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.05	Depth to water	1.00
		Slope	1.00				
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded							
Wilcox	90	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.01	Hard to pack	1.00	Depth to water	1.00
				Thin layer	0.22		
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded							
Wilcox	50	Very limited		Very limited		Very limited	
		Slope	1.00	Hard to pack	1.00	Depth to water	1.00
		Depth to bedrock	0.01	Thin layer	0.22		
Boswell	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.36	Depth to water	1.00

Table 16.—Engineering Properties

Map unit 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*	
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded												
Annemaine	0-4	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100	70-90	20-35	5-20
	4-17	Clay, clay loam, silty clay	CL	A-7-6, A-6	0	0	95-100	95-100	85-100	70-98	30-50	10-25
	17-35	Clay, silty clay, silty clay loam	CL, MH, ML, CH	A-7	0	0	95-100	95-100	90-100	80-99	43-70	13-35
	35-48	Sandy clay loam, loam, clay loam	CL, SC, ML	A-4, A-6	0	0	95-100	95-100	80-100	36-80	0-35	NP-15
	48-80	Sandy clay loam, fine sandy loam, sandy loam	SM, SC, SC-SM	A-2, A-4	0	0	95-100	95-100	60-100	30-50	0-20	NP-10
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded												
Annemaine	0-4	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	20-35	5-20
	4-17	Clay, clay loam, silty clay	CL	A-7-6, A-6	0	0	95-100	95-100	85-100	70-98	30-50	10-25
	17-35	Clay, silty clay, silty clay loam	CH, CL, MH, ML	A-7	0	0	95-100	95-100	90-100	80-99	43-70	13-35
	35-48	Sandy clay loam, loam, clay loam	ML, CL, SC	A-4, A-6	0	0	95-100	95-100	80-100	36-80	0-35	NP-15
	48-80	Sandy clay loam, fine sandy loam, sandy loam	SM, SC, SC-SM	A-4, A-2	0	0	95-100	95-100	60-100	30-50	0-20	NP-10
BaA—Bama fine sandy loam, 0 to 2 percent slopes												
Bama	0-10	Fine sandy loam	SC, SC-SM, SM	A-4	0	0	95-100	85-100	70-95	40-70	0-30	NP-10
	10-72	Sandy clay loam	SC, SC-SM, SM	A-4, A-6	0	0	90-100	85-100	80-95	36-70	15-35	2-15
	72-80	Sandy loam, sandy clay loam	CL, SC	A-6, A-4	0	0	85-100	80-100	80-95	40-70	20-40	8-18
BaB—Bama fine sandy loam, 2 to 5 percent slopes												
Bama	0-10	Fine sandy loam	SC-SM, SM, SC	A-4	0	0	95-100	85-100	70-95	40-70	0-30	NP-10
	10-72	Sandy clay loam	SC, SC-SM, SM	A-4, A-6	0	0	90-100	85-100	80-95	36-70	15-35	2-15
	72-80	Sandy clay loam, sandy loam	CL, SC	A-6, A-4	0	0	85-100	80-100	80-95	40-70	20-40	8-18

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded												
Bibb	0-8	Sandy loam	SM, ML, SC-SM	A-2, A-4	0	0	95-100	90-100	60-90	30-60	0-25	NP-7
	8-55	Sandy loam, loam	SC-SM, SM, CL-ML, ML	A-4, A-2-4	0	0	60-100	50-100	40-100	30-90	0-30	NP-7
	55-80	Loamy sand, sandy loam	ML, SM	A-4, A-1-b	0	0	60-100	50-100	40-100	25-80	0-30	NP-7
Iuka	0-15	Fine sandy loam	ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	70-100	30-60	0-20	NP-7
	15-46	Sandy loam	SM, ML, SC-SM	A-4	0	0	95-100	85-100	65-100	36-75	0-30	NP-7
	46-80	Sandy loam, fine sandy loam, loam	ML, SM	A-2, A-4	0	0	95-100	90-100	70-100	25-60	0-30	NP-7
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony												
Bodine	0-14	Very gravelly silt loam	CL-ML, GM, ML, SM	A-4, A-1-b, A-2	0	0-15	30-90	20-75	20-67	20-62	0-30	NP-7
	14-38	Extremely gravelly silt loam, very gravelly silt loam	GM, SC, SM, GC	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	38-58	Extremely gravelly loam, very gravelly silt loam	SM, GC, GM, SC	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	58-80	Extremely gravelly silty clay loam, very gravelly silt loam	SM, GC, GM, SC	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony												
Bodine	0-14	Very gravelly silt loam	CL-ML, GM, ML, SM	A-4, A-1-b, A-2	0	0-15	30-90	20-75	20-67	20-62	0-30	NP-7
	14-38	Extremely gravelly silt loam, very gravelly silt loam	SC, SM, GC, GM	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	38-58	Extremely gravelly loam, very gravelly silt loam	GC, GM, SC, SM	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	58-80	Extremely gravelly silty clay loam, very gravelly silt loam	GM, SC, SM, GC	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
Minvale	0-7	Gravelly silt loam	CL, GC, GM, ML	A-4	0	0-5	55-80	50-75	40-70	36-60	0-30	NP-10
	7-17	Cherty silty clay loam, gravelly silt loam, cherty loam	GC, GC-GM, CL, CL-ML	A-4, A-6	0	0-5	50-75	50-75	40-70	36-65	20-40	5-15
	17-37	Gravelly silty clay loam, cherty silty clay	CL-ML, GC, SC	A-7, A-4, A-6	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
	37-80	Very gravelly silty clay loam, cherty silty clay	GC, SC, GM	A-7, A-4, A-6	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony												
Bodine	0-14	Very gravelly silt loam	CL-ML, GM, ML, SM	A-1-b, A-2, A-4	0	0-15	30-90	20-75	20-67	20-62	0-30	NP-7
	14-38	Extremely gravelly silt loam, very gravelly silt loam	SC, SM, GC, GM	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	38-58	Extremely gravelly loam, very gravelly silt loam	GC, GM, SC, SM	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
	58-80	Extremely gravelly silty clay loam, very gravelly silt loam	GM, SC, SM, GC	A-2	0	10-35	20-70	15-65	15-45	12-35	26-42	8-16
Minvale	0-7	Gravelly silt loam	CL, GC, GM, ML	A-4	0	0-5	55-80	50-75	40-70	36-60	0-30	NP-10
	7-17	Cherty silty clay loam, gravelly silt loam, cherty loam	CL-ML, GC, GC-GM, CL	A-4, A-6	0	0-5	50-75	50-75	40-70	36-65	20-40	5-15
	17-37	Gravelly silty clay loam, cherty silty clay	GC, SC, CL-ML	A-4, A-6, A-7	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
	37-80	Very gravelly silty clay loam, cherty silty clay	SC, GM, GC	A-4, A-6, A-7	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded												
Cahaba	0-13	Sandy loam	SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-45	0-14	NP
	13-44	Sandy clay loam, clay loam	CL, SC	A-4, A-6	0	0	90-100	80-100	75-90	40-75	22-35	8-15
	44-80	Loamy sand, sandy loam	SP-SM, SM	A-2-4	0	0	95-100	90-100	60-85	10-35	0-14	NP
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded												
Cahaba	0-13	Sandy loam	SM	A-2-4, A-4	0	0	95-100	95-100	65-90	30-45	0-14	NP
	13-44	Sandy clay loam, clay loam	SC, CL	A-4, A-6	0	0	90-100	80-100	75-90	40-75	22-35	8-15
	44-80	Loamy sand, sandy loam	SM, SP-SM	A-2-4	0	0	95-100	90-100	60-85	10-35	0-14	NP
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded												
Choccolocco	0-8	Silt loam	ML	A-4	0	0	94-100	85-100	70-98	60-90	28-40	NP-8
	8-45	Silty clay loam, silt loam, loam	ML	A-6, A-7, A-4	0	0	95-100	95-100	85-98	60-95	35-45	7-14
	45-57	Fine sandy loam, loam	ML, SC-SM, SM	A-2, A-4	0	0	95-100	89-100	60-95	30-75	0-35	NP-7
	57-80	Sandy loam, loam	SM, ML, SC-SM	A-2, A-4	0	0	95-100	89-100	60-95	30-75	0-35	NP-7
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded												
Columbus	0-9	Loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	70-90	25-34	6-10
	9-18	Clay loam, loam, sandy clay loam	SC, CL	A-4, A-6	0	0	100	90-100	80-95	40-80	27-40	10-23
	18-42	Sandy clay loam	SC	A-6	0	0	100	90-100	50-85	10-45	17-24	6-15
	42-54	Sandy loam	SM	A-2-4	0	0	100	90-100	60-85	30-65	17-24	2-10
	54-80	Clay loam	CL	A-6	0	0	100	90-100	80-90	40-80	33-43	17-24
CoA—Colwell sandy loam, 0 to 2 percent slopes												
Colwell	0-7	Sandy loam	SM, SC-SM	A-4, A-6	0	0	95-100	95-100	75-95	45-75	10-35	NP-15
	7-10	Loam	CL-ML, SC, SC-SM	A-6, A-4	0	0	95-100	95-100	75-95	45-75	20-35	6-15
	10-80	Clay loam, sandy clay, clay	CH, SC, CL	A-7, A-4, A-6	0	0	98-100	95-100	80-99	40-80	28-50	7-25

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
CoB—Colwell sandy loam, 2 to 5 percent slopes												
Colwell	0-7	Sandy loam	SC-SM, SM	A-6, A-4	0	0	95-100	95-100	75-95	45-75	10-35	NP-15
	7-10	Sandy loam	SC-SM, SC	A-4, A-6	0	0	95-100	95-100	75-95	45-75	20-35	6-15
	10-80	Clay, sandy clay, clay loam	CH, CL, SC	A-4, A-6, A-7	0	0	98-100	95-100	80-99	40-80	28-50	7-25
CuB—Conecuh sandy loam, 2 to 5 percent slopes												
Conecuh	0-5	Sandy loam	ML, SC-SM, SM	A-4	0	0	95-100	95-100	70-100	40-70	19-39	3-17
	5-41	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0	95-100	95-100	85-100	70-95	44-60	25-36
	41-55	Clay, silty clay	CH, CL	A-7	0	0	95-100	95-100	90-100	80-98	49-78	32-51
	55-80	Sandy clay loam, clay loam	CH, CL	A-7	0	0	95-100	95-100	90-100	80-98	49-78	32-51
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded												
Conecuh	0-5	Sandy loam	ML, SC-SM, SM	A-4	0	0	95-100	95-100	70-100	40-70	19-39	3-17
	5-41	Clay, silty clay, silty clay loam	CH, CL, MH	A-7	0	0	95-100	95-100	85-100	70-95	44-60	15-36
	41-55	Clay, silty clay	CH, CL	A-7	0	0	95-100	95-100	90-100	80-98	15-78	32-51
	55-80	Sandy clay loam, clay loam	CH, CL	A-7	0	0	95-100	95-100	90-100	80-98	49-78	32-51
Luverne	0-9	Sandy loam	SM	A-2, A-4, A-2-4	0	0-3	87-100	84-100	80-100	30-60	19-33	3-13
	9-20	Clay loam, clay	CH, CL	A-7	0	0-3	95-100	90-100	85-100	50-95	43-58	25-36
	20-48	Clay loam, sandy clay loam	CL	A-7	0	0-3	95-100	85-100	85-100	36-76	29-70	13-35
	48-80	Sandy clay loam	CL, SC	A-4, A-6	0	0-2	90-100	85-100	70-100	25-65	20-43	6-25
FaA—Fluvaquents, ponded												
Fluvaquents	0-6	Sandy loam	ML, SM, CL-ML	A-2, A-4	0	0	100	90-100	60-90	30-60	0-25	NP-7
	6-80	Stratified sandy loam to clay	CL, ML, SM	A-4, A-6	0	0	100	90-100	75-100	25-50	0-25	NP-15
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes												
Fullerton	0-6	Gravelly silt loam	CL, CL-ML, GC, GC-GM	A-2, A-4	0	0-1	60-94	45-80	40-75	30-70	18-30	3-10
	6-28	Gravelly silty clay loam	GC, ML, SC, CL	A-7, A-2, A-4, A-6	0	0	60-90	45-80	40-75	30-70	29-42	8-17
	28-40	Gravelly clay, gravelly silty clay	CL, GC, MH, ML	A-7	0	0	60-90	45-80	40-75	30-75	48-78	20-42
	40-80	Gravelly clay, gravelly silty clay	CL, ML, GC	A-7	0	0	60-90	45-80	40-75	30-75	48-78	20-42

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes												
Gorgas	0-5	Loamy sand	GC-GM, GM, SM	A-4, A-2	0	0	60-95	60-90	60-90	15-65	0-30	NP-7
	5-9	Sandy loam, gravelly sandy loam	GM, ML, SM, GC-GM	A-2-4, A-2, A-4	0	0-10	55-100	55-100	45-100	30-65	0-30	NP-7
	9-17	Sandy loam, gravelly sandy loam	ML, SM, GC-GM, GM	A-4, A-2	0	0-10	55-100	55-100	45-100	30-65	0-30	NP-7
	17-80	Bedrock	—	—	—	—	—	—	—	—	—	—
Rock outcrop	0-80	Bedrock	—	—	—	—	—	—	—	—	0-14	—
LdA—Lucedale sandy loam, 0 to 2 percent slopes												
Lucedale	0-4	Sandy loam, fine sandy loam	SM, ML	A-2, A-4	0	0	100	95-100	80-95	25-65	0-30	NP-3
	4-75	Sandy clay loam	CL, SC, SC-SM	A-2, A-4, A-6	0	0	95-100	95-100	80-100	30-75	25-40	4-15
	75-80	Sandy clay loam	CL, SC, SC-SM	A-2, A-4, A-6	0	0	95-100	95-100	80-100	30-75	25-40	4-15
LdB—Lucedale sandy loam, 2 to 5 percent slopes												
Lucedale	0-4	Sandy loam, fine sandy loam	ML, SM	A-2, A-4	0	0	100	95-100	80-95	25-65	0-30	NP-3
	4-75	Sandy clay loam	CL, SC, SC-SM	A-2, A-4, A-6	0	0	95-100	95-100	80-100	30-75	25-40	4-15
	75-80	Sandy clay loam	CL, SC, SC-SM	A-4, A-6, A-2	0	0	95-100	95-100	80-100	30-75	25-40	4-15
LnB—Luverne sandy loam, 2 to 5 percent slopes												
Luverne	0-9	Sandy loam	SM	A-2, A-4, A-2-4	0	0-3	87-100	84-100	80-100	30-60	19-33	3-13
	9-20	Clay loam, clay	CL, CH	A-7	0	0-3	95-100	90-100	85-100	50-95	43-58	25-36
	20-48	Clay loam, sandy clay loam	CL	A-7	0	0-3	95-100	85-100	85-100	36-76	29-70	13-35
	48-80	Sandy clay loam	CL, SC	A-6, A-4	0	0-2	90-100	85-100	70-100	25-65	20-43	6-25

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes												
Luverne	0-9	Sandy loam	SM	A-2, A-4, A-2-4	0	0-3	87-100	84-100	80-100	30-60	19-33	3-13
	9-20	Clay loam, clay	CH, CL	A-7	0	0-3	95-100	90-100	85-100	50-95	43-58	25-36
	20-48	Clay loam, sandy clay loam	CL	A-7	0	0-3	95-100	85-100	85-100	36-76	29-70	13-35
	48-80	Sandy clay loam	CL, SC	A-4, A-6	0	0-2	90-100	85-100	70-100	25-65	20-43	6-25
Smithdale	0-12	Sandy loam	SC-SM, SM	A-4, A-2	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	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
	43-80	Loam, sandy loam	ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes												
Luverne	0-9	Sandy loam	SM	A-2-4, A-2, A-4	0	0-3	87-100	84-100	80-100	30-60	19-33	3-13
	9-20	Clay loam, clay	CH, CL	A-7	0	0-3	95-100	90-100	85-100	50-95	43-58	25-36
	20-48	Clay loam, sandy clay loam	CL	A-7	0	0-3	95-100	85-100	85-100	36-76	29-70	13-35
	48-80	Sandy clay loam	CL, SC	A-6, A-4	0	0-2	90-100	85-100	70-100	25-65	20-43	6-25
Smithdale	0-12	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	SC, SC-SM, CL, CL-ML	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded												
Mantachie	0-12	Fine sandy loam, silt loam	SM, CL-ML, ML	A-4	0	0	100	100	90-100	45-85	0-30	NP-10
	12-80	Loam, clay loam, sandy clay loam	CL, CL-ML, SC	A-4, A-6	0	0-5	95-100	90-100	80-95	45-80	20-40	5-15
Iuka	0-15	Fine sandy loam	ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	70-100	30-60	0-20	NP-7
	15-46	Sandy loam	ML, SC-SM, SM	A-4	0	0	95-100	85-100	65-100	36-75	0-30	NP-7
	46-80	Sandy loam, fine sandy loam, loam	SM, ML	A-2, A-4	0	0	95-100	90-100	70-100	25-60	0-30	NP-7
Kinston	0-10	Loam, silt loam	CL-ML, ML, CL	A-4, A-6	0	0	100	98-100	85-100	50-97	17-40	4-15
	10-80	Loam, clay loam, sandy clay loam	CL, SC	A-4, A-6	0	0	100	95-100	75-100	48-95	20-45	8-22

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded												
Maubila	0-4	Flaggy loam	SM, SC-SM	A-2	0	0-5	90-100	85-100	60-95	10-35	0-25	NP-6
	4-27	Clay, clay loam	CL, SC, CH	A-7, A-6	0	0	95-100	90-100	80-95	45-90	35-50	12-25
	27-32	Sandy clay loam, clay loam	CH, CL, SC	A-6, A-7, A-7-6	0	0	95-100	90-100	85-100	45-98	35-60	20-45
	32-42	Silty clay, clay loam	CL, CH	A-6, A-7, A-7-6	0	0	95-100	90-100	85-100	60-78	35-60	20-45
	42-80	Clay	CH	A-7	0	0	100	100	—	—	46-63	28-43
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes												
Maubila	0-4	Flaggy loam	SC-SM, SM	A-2	0	0-5	90-100	85-100	60-95	10-35	0-25	NP-6
	4-27	Clay, clay loam	SC, CH, CL	A-6, A-7	0	0	95-100	90-100	80-95	45-90	35-50	12-25
	27-32	Sandy clay loam, clay loam	CL, SC, CH	A-6, A-7, A-7-6	0	0	95-100	90-100	85-100	45-98	35-60	20-45
	32-42	Silty clay, clay loam	CH, CL	A-7, A-7-6, A-6	0	0	95-100	90-100	85-100	60-78	35-60	20-45
	42-80	Clay	CH	A-7	0	0	100	100	—	—	46-63	28-43
Smithdale	0-12	Sandy loam	SC-SM, SM	A-4, A-2	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	CL-ML, SC, SC-SM, CL	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
Boykin	0-4	Loamy sand	SC-SM, SM	A-2-4, A-4	0	0	97-100	95-100	75-98	17-45	16-25	NP-5
	4-31	Loamy fine sand, loamy sand	SM, SC-SM	A-2-4, A-4	0	0	97-100	95-100	70-98	17-45	16-25	NP-5
	31-80	Fine sandy loam, sandy clay loam	CL, SC	A-4, A-6, A-7-6	0	0	95-100	95-100	80-98	36-55	22-45	8-30

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes												
Maubila	0-4	Flaggy loam	SM, SC-SM	A-2	0	0-5	90-100	85-100	60-95	10-35	0-25	NP-6
	4-27	Clay, clay loam	CH, CL, SC	A-7, A-6	0	0	95-100	90-100	80-95	45-90	35-50	12-25
	27-32	Sandy clay loam, clay loam	CL, SC, CH	A-7-6, A-6, A-7	0	0	95-100	90-100	85-100	45-98	35-60	20-45
	32-42	Silty clay, clay loam	CL, CH	A-6, A-7, A-7-6	0	0	95-100	90-100	85-100	60-78	35-60	20-45
	42-80	Clay	CH	A-7	0	0	100	100	—	—	46-63	28-43
Smithdale	0-12	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	SC, SC-SM, CL, CL-ML	A-6, A-4	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	SM, ML, SC	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes												
Maubila	0-4	Flaggy loam	SC-SM, SM	A-2	0	0-5	90-100	85-100	60-95	10-35	0-25	NP-6
	4-27	Clay, clay loam	SC, CH, CL	A-6, A-7	0	0	95-100	90-100	80-95	45-90	35-50	12-25
	27-32	Sandy clay loam, clay loam	CL, SC, CH	A-7, A-7-6, A-6	0	0	95-100	90-100	85-100	45-98	35-60	20-45
	32-42	Silty clay, clay loam	CL, CH	A-7, A-7-6, A-6	0	0	95-100	90-100	85-100	60-78	35-60	20-45
	42-80	Clay	CH	A-7	0	0	100	100	—	—	46-63	28-43
Smithdale	0-12	Sandy loam	SM, SC-SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	CL-ML, SC, SC-SM, CL	A-6, A-4	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	ML, SC, SM	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
MtA—Minter silty clay loam, ponded												
Minter	0-10	Silty clay loam	CH, CL	A-6, A-7	0	0	100	100	90-100	75-95	35-55	15-28
	10-18	Clay loam, silty clay, clay	CL, CH	A-7, A-6	0	0	100	100	90-100	75-95	37-59	18-32
	18-72	Clay loam, silty clay, clay	CL, CH	A-7, A-6	0	0	100	100	90-100	75-95	37-59	18-32
	72-80	Sandy clay loam, silty clay, clay	CL, SC	A-6, A-7	0	0	100	100	90-100	49-95	37-59	18-32

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes												
Minvale	0-7	Gravelly silt loam	CL, GC, GM, ML	A-4	0	0-5	55-80	50-75	40-70	36-60	0-30	NP-10
	7-17	Cherty silty clay loam, gravelly silt loam, cherty loam	CL-ML, GC, GC-GM, CL	A-4, A-6	0	0-5	50-75	50-75	40-70	36-65	20-40	5-15
	17-37	Gravelly silty clay loam, cherty silty clay	CL-ML, GC, SC	A-4, A-6, A-7	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
	37-80	Very gravelly silty clay loam, cherty silty clay	GC, SC, GM	A-4, A-6, A-7	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes												
Minvale	0-7	Gravelly silt loam	GC, GM, ML, CL	A-4	0	0-5	55-80	50-75	40-70	36-60	0-30	NP-10
	7-17	Cherty silty clay loam, gravelly silt loam, cherty loam	GC-GM, CL, CL-ML, GC	A-4, A-6	0	0-5	50-75	50-75	40-70	36-65	20-40	5-15
	17-37	Gravelly silty clay loam, cherty silty clay	CL-ML, GC, SC	A-6, A-7, A-4	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
	37-80	Very gravelly silty clay loam, cherty silty clay	SC, GM, GC	A-4, A-6, A-7	0	0-5	55-80	50-75	40-70	36-65	25-50	7-23
MwF—Montevallo-Townley complex, 15 to 35 percent slopes												
Montevallo	0-2	Very channery silt loam	CL, CL-ML, SC, SC-SM	A-4	0	0	60-88	50-75	45-70	40-65	0-30	NP-10
	2-16	Very channery silt loam	SC, SC-SM, GC, GC-GM	A-4, A-6, A-1-b, A-2	0	0	35-70	23-50	15-45	15-40	20-40	2-15
	16-80	Bedrock	—	—	—	—	—	—	—	—	—	—
Townley	0-12	Silt loam	CL-ML, ML, CL	A-4	0	0	80-98	70-95	65-90	50-65	15-35	NP-10
	12-25	Silty clay loam, silty clay	CH, CL, MH, ML	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	25-35	Silty clay loam, silty clay	ML, CH, CL, MH	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	35-80	Bedrock	—	—	0	0	—	—	—	—	—	—

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded												
Myatt	0-4	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	95-100	60-90	30-70	0-25	NP-5
	4-36	Loam, sandy clay loam, clay loam	SC-SM, SC, CL	A-6, A-4	0	0	95-100	95-100	80-100	40-80	0-30	5-20
	36-80	Fine sandy loam, loam, clay loam	SC-SM, CL, CL-ML, SC	A-2, A-4, A-6	0	0	75-100	60-100	60-100	30-97	15-40	5-20
NaC—Nauvoo sandy loam, 2 to 8 percent slopes												
Nauvoo	0-6	Sandy loam	CL-ML, SC-SM, SM	A-4, A-2	0	0-3	90-100	85-100	55-93	30-60	0-30	NP-8
	6-13	Fine sandy loam, loam	SM, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	85-100	55-90	35-65	0-34	NP-15
	13-40	Loam, sandy clay loam, clay loam	SC, CL, ML	A-7, A-4, A-6	0	0-3	95-100	90-100	60-95	40-80	30-50	8-24
	40-55	Fine sandy loam, sandy clay loam	SC, SC-SM, CL, CL-ML	A-4, A-6	0	0-5	90-100	85-100	55-90	35-65	18-34	4-15
	55-80	Bedrock	—	—	—	—	—	—	—	—	—	—
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded												
Ochlockonee	0-7	Loamy sand, sandy loam	ML, SC-SM, SM, SM	A-4, A-2-4	0	0	100	95-100	65-90	35-70	0-26	NP-5
	7-26	Fine sandy loam, sandy loam, loamy sand	ML, SM	A-4	0	0	100	95-100	95-100	36-75	0-32	NP-9
	26-80	Loamy sand, sandy loam	SM, SP-SM	A-4, A-2-4	0	0	100	95-100	85-99	0-40	0-32	NP-9
Riverview	0-7	Silt loam, sandy loam	ML, SM	A-4, A-6	0	0	100	100	90-100	45-80	15-30	3-14
	7-30	Sandy clay loam, sandy loam, loam	CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	90-100	45-95	20-40	3-20
	30-80	Loamy sand, sandy loam, sand	SC-SM, SM	A-2, A-4	0	0	100	100	50-95	15-45	0-20	NP-7

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes												
Palmerdale	0-4	Extremely channery silt loam	SC, SM, GC, GM	A-6, A-1, A-2, A-4	0	0-6	40-85	15-75	10-60	9-40	25-40	3-16
	4-80	Extremely channery silt loam, very channery loam, extremely channery loam	GC, GM, SC, SM	A-6, A-1, A-2, A-4	0	0-6	40-85	15-75	10-60	9-40	25-40	3-16
Brilliant	0-4	Very channery silt loam	SM, GM, SC, SC-SM	A-1, A-2-4, A-2-6	0	0-6	40-90	15-75	10-40	9-30	0-30	NP-16
	4-42	Extremely channery sandy loam, extremely channery loam, extremely channery silt loam	SM, GM, GC, GC-GM	A-1, A-4, A-2-6	0	0-6	40-90	15-75	10-40	9-40	0-30	NP-16
	42-80	Extremely channery sandy loam, extremely channery loam, extremely channery silty clay loam	GC-GM, GC, GM, SM	A-1, A-2-4, A-6	0	0-5	40-90	15-75	10-40	9-40	0-30	NP-16
Pt—Pits-Udorthents complex												
Udorthents	0-80	Loamy sand, sandy loam	SM, SP-SM	A-2-4	0	0	95-100	90-100	60-85	10-35	0-14	NP
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes												
Rock outcrop	0-80	Bedrock	—	—	0-80	0	—	—	—	—	0-14	—
Barfield	0-6	Gravelly silt loam	CL, MH, CH	A-6, A-7	0-3	10-25	90-100	85-95	80-90	75-85	35-65	12-35
	6-13	Clay, stony silty clay	CH, CL, MH	A-7	0	10-25	70-100	65-90	60-85	55-80	40-70	22-40
	13-80	Bedrock	—	A-7	—	—	—	—	—	—	—	—
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes												
Saffell	0-5	Gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-2, A-4, A-1	0	0-5	50-80	50-75	40-70	20-50	0-25	NP-5
	5-10	Very gravelly sandy loam, gravelly sandy clay loam, gravelly loam	SC-SM, GC, GC-GM, SC	A-4, A-6, A-1, A-2	0	0-10	30-75	25-75	20-70	12-50	20-40	4-18
	10-42	Very gravelly sandy clay loam, very gravelly fine sandy loam, very gravelly loam	GC, GC-GM, GP-GC	A-6, A-1, A-2, A-4	0	0-10	25-55	25-50	20-50	12-40	20-40	4-15
	42-80	Gravelly sandy loam, very gravelly sandy loam, gravelly loamy sand	SM, GC, GM, SC	A-1, A-2, A-3	0-5	0-15	15-80	10-75	10-65	5-35	0-35	NP-15

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
ShA—Savannah silt loam, 0 to 2 percent slopes												
Savannah	0-7	Silt loam	ML, SM	A-2-4, A-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	7-20	Sandy clay loam, clay loam, loam	CL, CL-ML, SC	A-4, A-6	0	0	98-100	90-100	80-100	40-80	23-40	7-19
	20-51	Loam, clay loam, sandy clay loam	SC, CL, CL-ML	A-7, A-2, A-4, A-6	0	0	94-100	90-100	60-100	30-80	23-43	7-19
	51-70	Loam, clay loam, sandy clay loam	SC, CL, CL-ML	A-4, A-6, A-7, A-2	0	0	94-100	90-100	60-100	30-80	23-43	7-19
	70-80	Loam, clay loam, sandy clay loam	SC, CL, CL-ML	A-4, A-6, A-7, A-2	0	0	94-100	90-100	60-100	30-80	23-43	7-19
ShB—Savannah silt loam, 2 to 5 percent slopes												
Savannah	0-7	Silt loam	ML, SM	A-4, A-2-4	0	0	98-100	90-100	60-100	30-65	0-25	NP-4
	7-20	Sandy clay loam, clay loam, loam	CL-ML, SC, CL	A-6, A-4	0	0	98-100	90-100	80-100	40-80	23-40	7-19
	20-51	Loam, clay loam, sandy clay loam	CL, CL-ML, SC	A-7, A-2, A-4, A-6	0	0	94-100	90-100	60-100	30-80	23-43	7-19
	51-70	Loam, clay loam, sandy clay loam	SC, CL, CL-ML	A-6, A-7, A-2, A-4	0	0	94-100	90-100	60-100	30-80	23-43	7-19
	70-80	Loam, clay loam, sandy clay loam	CL, CL-ML, SC	A-7, A-2, A-4, A-6	0	0	94-100	90-100	60-100	30-80	23-43	7-19
SmC—Smithdale sandy loam, 2 to 8 percent slopes												
Smithdale	0-12	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	CL-ML, SC, SC-SM, CL	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	SM, ML, SC	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
SmD—Smithdale sandy loam, 5 to 15 percent slopes												
Smithdale	0-12	Sandy loam	SM, SC-SM	A-4, A-2	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	Sandy clay loam, loam	SC, SC-SM, CL, CL-ML	A-4, A-6	0	0	100	85-100	80-96	45-75	23-38	7-16
	43-80	Loam, sandy loam	SC, SM, ML	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes												
Sipsey	0-15	Sandy loam	SM, SC-SM	A-2, A-4	0	0-3	90-100	85-100	55-93	30-60	0-30	NP-8
	15-33	Sandy clay loam, clay loam, loam	CL, ML, SC	A-7, A-4, A-6	0	0-3	95-100	90-100	60-95	40-80	30-50	8-24
	33-80	Bedrock	—	A-6	—	—	—	—	—	—	—	—
Nauvoo	0-6	Sandy loam	CL-ML, SC-SM, SM	A-2, A-4	0	0-3	90-100	85-100	55-93	30-60	0-30	NP-8
	6-13	Fine sandy loam, loam	SM, CL-ML, SC-SM	A-6, A-4	0	0-5	90-100	85-100	55-90	35-65	0-34	NP-15
	13-40	Clay loam, sandy clay loam, loam	ML, SC, CL	A-7, A-4, A-6	0	0-3	95-100	90-100	60-95	40-80	30-50	8-24
	40-55	Fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-5	90-100	85-100	55-90	35-65	18-34	4-15
	55-80	Bedrock	—	—	—	—	—	—	—	—	—	—
Townley	0-12	Silt loam	CL, CL-ML, ML	A-4	0	0	80-98	70-95	65-90	50-65	15-35	NP-10
	12-25	Silty clay loam, silty clay	MH, ML, CH, CL	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	25-35	Silty clay loam, silty clay	MH, ML, CH, CL	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	35-80	Bedrock	—	—	0	0	—	—	—	—	—	—

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes												
Sipsey	0-15	Sandy loam	SC-SM, SM	A-2, A-4	0	0-3	90-100	85-100	55-93	30-60	0-30	NP-8
	15-33	Sandy clay loam, clay loam, loam	CL, ML, SC	A-6, A-7, A-4	0	0-3	95-100	90-100	60-95	40-80	30-50	8-24
	33-80	Bedrock	—	A-6	—	—	—	—	—	—	—	—
Nauvoo	0-6	Sandy loam	SM, CL-ML, SC-SM	A-4, A-2	0	0-3	90-100	85-100	55-93	30-60	0-30	NP-8
	6-13	Fine sandy loam, loam	CL-ML, SC-SM, SM	A-4, A-6	0	0-5	90-100	85-100	55-90	35-65	0-34	NP-15
	13-40	Clay loam, sandy clay loam, loam	CL, ML, SC	A-7, A-4, A-6	0	0-3	95-100	90-100	60-95	40-80	30-50	8-24
	40-55	Fine sandy loam, sandy clay loam	SC, SC-SM, CL, CL-ML	A-6, A-4	0	0-5	90-100	85-100	55-90	35-65	18-34	4-15
	55-80	Bedrock	—	—	—	—	—	—	—	—	—	—
Sunlight	0-6	Channery sandy loam	SM, SC-SM	A-4	0	0-5	60-88	50-75	45-70	40-65	0-30	NP-10
	6-12	Extremely channery loam, extremely channery silt loam	GC, GC-GM, SC-SM	A-4, A-6, A-1-b, A-2	0	0-5	35-70	23-50	15-45	15-40	20-40	2-15
	12-80	Bedrock	—	—	—	—	—	—	—	—	—	—
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery												
Talbott	0-12	Silt loam	CH, CL	A-6, A-7	0	0-5	95-100	90-100	85-95	80-95	35-60	12-32
	12-25	Clay, silty clay	CL, CH	A-7	0	0-10	95-100	90-100	85-95	80-95	41-80	20-45
	25-30	Clay, silty clay	CH, CL	A-7	0	0-10	95-100	90-100	85-95	80-95	41-80	20-45
	30-80	Bedrock	—	—	0	0	—	—	—	—	—	—
	35-80	Bedrock	—	—	0	0	—	—	—	—	—	—
ToB—Townley silt loam, 2 to 6 percent slopes												
Townley	0-12	Silt loam	CL, CL-ML, ML	A-4	0	0	80-98	70-95	65-90	50-65	15-35	NP-10
	12-25	Silty clay loam, silty clay	ML, CH, CL, MH	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	25-35	Silty clay loam, silty clay	CH, CL, MH, ML	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	35-80	Bedrock	—	—	0	0	—	—	—	—	—	—

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
ToD—Townley silt loam, 6 to 15 percent slopes												
Townley	0-12	Silt loam	ML, CL, CL-ML	A-4	0	0	80-98	70-95	65-90	50-65	15-35	NP-10
	12-25	Silty clay loam, silty clay	ML, CH, CL, MH	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	25-35	Silty clay loam, silty clay	MH, ML, CH, CL	A-7	0	0	75-95	65-95	60-92	55-90	40-72	14-37
	35-80	Bedrock	—	—	0	0	—	—	—	—	—	—
WbF—Wadley-Boykin complex, 15 to 35 percent slopes												
Boykin	0-4	Loamy sand	SC-SM, SM	A-2-4, A-4	0	0	97-100	95-100	75-98	17-45	16-25	NP-5
	4-31	Loamy fine sand, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	97-100	95-100	70-98	17-45	16-25	NP-5
	31-80	Fine sandy loam, sandy clay loam	SC-SM, SC	A-4, A-6, A-7-6	0	0	95-100	95-100	80-98	36-55	22-45	8-30
Wadley	0-10	Loamy sand	SM, SP-SM	A-2	0	0	98-100	95-100	75-100	10-40	0-14	NP
	10-44	Loamy sand	SM, SP-SM	A-2	0	0	98-100	95-100	75-100	10-40	0-14	NP
	44-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC, SC-SM	A-2, A-4, A-6	0	0	100	95-100	70-100	20-50	0-40	NP-17
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes												
Wadley	0-10	Loamy sand	SM, SP-SM	A-2	0	0	98-100	95-100	75-100	10-40	0-14	NP
	10-44	Loamy sand	SM, SP-SM	A-2	0	0	98-100	95-100	75-100	10-40	0-14	NP
	44-80	Sandy loam, fine sandy loam, sandy clay loam	SC, SC-SM, SM	A-4, A-6, A-2	0	0	100	95-100	70-100	20-50	0-40	NP-17
Smithdale	0-12	Sandy loam	SM, SC-SM	A-2, A-4	0	0	100	85-100	60-95	28-49	0-20	NP-5
	12-43	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
	43-80	Loam, sandy loam	SM, ML, SC	A-4	0	0	100	85-100	65-95	36-70	0-30	NP-10
Boykin	0-4	Loamy sand	SC-SM, SM	A-2-4, A-4	0	0	97-100	95-100	75-98	17-45	16-25	NP-5
	4-31	Loamy fine sand, loamy sand	SC-SM, SM	A-4, A-2-4	0	0	97-100	95-100	70-98	17-45	16-25	NP-5
	31-80	Fine sandy loam, sandy clay loam	CL, SC	A-7-6, A-4, A-6	0	0	95-100	95-100	80-98	36-55	22-45	8-30

Table 16.—Engineering Properties—Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded												
Wilcox	0-4	Clay loam	CH	A-7	0	0	100	100	95-100	80-98	50-70	25-40
	4-46	Clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	46-80	Bedrock	—	—	0	0	—	—	—	—	0-0	NP
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded												
Wilcox	0-4	Clay loam	CH	A-7	0	0	100	100	95-100	80-98	50-70	25-40
	4-46	Clay	CH	A-7	0	0	100	100	90-100	75-98	60-80	39-55
	46-80	Bedrock	—	—	0	0	—	—	—	—	0-0	NP
Boswell	0-5	Fine sandy loam	ML, SM	A-4	0	0	100	100	60-85	40-55	0-14	NP
	5-10	Loam	ML, SM	A-4	0	0	100	100	60-85	40-55	0-14	NP
	10-41	Clay, silty clay, silty clay loam	CH	A-7	0	0	100	100	90-100	75-95	50-70	25-40
	41-73	Clay, silty clay, silty clay loam	CH	A-7	0	0	100	100	90-100	75-95	50-70	25-40
	73-80	Clay loam, silty clay, silty clay loam	CH	A-7	0	0	100	100	90-100	75-95	50-70	25-40

Table 17.—Physical Soil Properties

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded														
Annemaine	0-4	10-40	50-80	10-20	1.30-1.55	4.00-14.00	0.14-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	4-17	20-50	20-50	35-50	1.30-1.45	0.42-1.40	0.14-0.18	3.0-5.9	0	.37	.37			
	17-35	0-20	30-70	25-60	1.25-1.40	0.42-1.40	0.14-0.18	3.0-5.9	0	.37	.37			
	35-48	30-50	25-45	18-35	1.30-1.60	1.40-4.00	0.14-0.18	0.0-2.9	0	.37	.37			
	48-80	50-70	10-30	5-25	1.40-1.60	1.40-14.00	0.14-0.18	0.0-2.9	0	.32	.32			
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded														
Annemaine	0-4	10-40	50-80	10-20	1.30-1.55	4.00-14.00	0.14-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	4-17	20-50	20-50	35-50	1.30-1.45	0.42-1.40	0.14-0.18	3.0-5.9	0	.37	.37			
	17-35	0-20	30-70	25-60	1.25-1.40	0.42-1.40	0.14-0.18	3.0-5.9	0	.37	.37			
	35-48	30-50	25-45	18-35	1.30-1.60	1.40-4.00	0.14-0.18	0.0-2.9	0	.37	.37			
	48-80	50-70	10-30	5-25	1.40-1.60	1.40-14.00	0.14-0.18	0.0-2.9	0	.32	.32			
BaA—Bama fine sandy loam, 0 to 2 percent slopes														
Bama	0-10	50-70	10-30	7-22	1.30-1.60	4.00-42.00	0.08-0.15	0.0-2.9	0.5-1.0	.24	.24	5	3	86
	10-72	50-70	5-20	18-32	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0	.32	.32			
	72-80	50-80	5-30	5-20	1.40-1.60	4.00-14.00	0.12-0.18	0.0-2.9	0	.32	.32			
BaB—Bama fine sandy loam, 2 to 5 percent slopes														
Bama	0-10	50-70	10-30	7-22	1.30-1.60	4.00-42.00	0.08-0.15	0.0-2.9	0.5-1.0	.24	.24	5	3	86
	10-72	50-70	10-25	18-32	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0	.32	.32			
	72-80	50-70	10-30	15-35	1.40-1.60	4.00-14.00	0.12-0.18	0.0-2.9	0	.32	.32			
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded														
Bibb	0-8	50-75	5-30	2-18	1.50-1.70	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	8-55	50-75	5-30	2-18	1.45-1.75	4.00-14.00	0.10-0.20	0.0-2.9	0.5-1.0	.37	.37			
	55-80	70-90	5-20	2-10	1.45-1.75	4.00-14.00	0.10-0.20	0.0-2.9	0.5-1.0	.37	.37			
Iuka	0-15	50-70	0-30	6-15	1.30-1.50	14.00-42.00	0.10-0.15	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	15-46	50-75	0-30	8-18	1.35-1.50	4.00-14.00	0.10-0.20	0.0-2.9	0	.28	.28			
	46-80	30-55	30-45	5-28	1.35-1.50	4.00-14.00	0.10-0.20	0.0-2.9	0	.20	.20			
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony														
Bodine	0-14	20-35	40-60	8-20	1.35-1.55	14.00-42.00	0.07-0.12	0.0-2.9	1.0-2.0	.28	.37	5	5	56
	14-38	20-30	40-70	5-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	38-58	30-50	35-60	15-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	58-80	0-15	40-70	23-38	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony														
Bodine	0-14	20-35	40-60	8-20	1.35-1.55	14.00-42.00	0.07-0.12	0.0-2.9	1.0-2.0	.28	.37	5	5	56
	14-38	20-30	40-70	5-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	38-58	30-50	35-60	15-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	58-80	0-15	40-70	23-38	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
Minvale	0-7	20-30	50-80	15-30	1.30-1.45	14.00-42.00	0.14-0.18	0.0-2.9	0.5-2.0	.28	.37	5	6	48
	7-17	15-40	40-80	15-35	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32			
	17-37	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
	37-80	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony														
Bodine	0-14	20-35	40-60	8-20	1.35-1.55	14.00-42.00	0.07-0.12	0.0-2.9	1.0-2.0	.28	.37	5	5	56
	14-38	20-30	40-70	5-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	38-58	30-50	35-60	15-25	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
	58-80	0-15	40-70	23-38	1.40-1.60	14.00-42.00	0.05-0.10	0.0-2.9	0.0-0.5	.24	.32			
Minvale	0-7	20-30	50-80	15-30	1.30-1.45	14.00-42.00	0.14-0.18	0.0-2.9	0.5-2.0	.28	.37	5	6	48
	7-17	15-40	40-80	15-35	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32			
	17-37	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
	37-80	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded														
Cahaba	0-13	50-75	10-30	7-17	1.35-1.60	14.00-42.00	0.10-0.14	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	13-44	40-70	10-25	18-35	1.35-1.60	4.00-14.00	0.12-0.20	0.0-2.9	0	.28	.28			
	44-80	50-75	10-30	4-20	1.40-1.70	14.00-141.00	0.05-0.10	0.0-2.9	0	.24	.24			
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded														
Cahaba	0-13	50-75	10-30	7-17	1.35-1.60	14.00-42.00	0.10-0.14	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	13-44	40-75	10-25	18-35	1.35-1.60	4.00-14.00	0.12-0.20	0.0-2.9	0	.28	.28			
	44-80	50-75	10-30	4-20	1.40-1.70	14.00-141.00	0.05-0.10	0.0-2.9	0	.24	.24			
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded														
Choccolocco	0-8	10-30	50-80	7-25	1.40-1.65	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-45	0-28	40-70	25-35	1.40-1.60	4.00-14.00	0.15-0.20	0.0-2.9	0.0-0.3	.37	.37			
	45-57	50-70	10-40	2-18	1.40-1.60	14.00-42.00	0.10-0.16	0.0-2.9	0.0-0.3	.32	.32			
	57-80	50-75	10-30	5-15	1.40-1.60	14.00-42.00	0.10-0.16	0.0-2.9	0	.32	.32			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded														
Columbus	0-9	30-50	40-80	10-16	1.50-1.55	4.00-14.00	0.20-0.22	0.0-2.9	2.0-3.0	.37	.37	4	6	48
	9-18	20-50	20-40	18-35	1.55-1.60	4.00-14.00	0.12-0.15	0.0-2.9	0.0-0.5	.20	.20			
	18-42	50-70	5-25	18-35	1.35-1.40	4.00-14.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
	42-54	50-80	7-30	5-18	1.25-1.40	4.00-14.00	0.20-0.22	0.0-2.9	0.0-0.5	.17	.17			
	54-80	20-50	10-40	25-35	1.30-1.40	1.40-4.00	0.12-0.15	0.0-2.9	0.0-0.5	.20	.20			
CoA—Colwell sandy loam, 0 to 2 percent slopes														
Colwell	0-7	50-80	10-30	8-20	1.30-1.65	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.24	.24	5	6	48
	7-10	30-80	10-31	8-30	1.30-1.65	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.24	.24			
	10-80	0-50	10-35	35-55	1.35-1.55	4.00-14.00	0.14-0.18	0.0-2.9	0.0-0.5	.17	.17			
CoB—Colwell sandy loam, 2 to 5 percent slopes														
Colwell	0-7	—	10-30	8-20	1.30-1.65	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.24	.24	5	6	48
	7-10	—	10-30	5-20	1.30-1.65	4.00-14.00	0.12-0.18	0.0-2.9	1.0-3.0	.24	.24			
	10-80	—	10-35	35-55	1.35-1.55	4.00-14.00	0.14-0.18	0.0-2.9	0.0-0.5	.17	.17			
CuB—Conecuh sandy loam, 2 to 5 percent slopes														
Conecuh	0-5	50-80	10-30	7-25	1.40-1.60	4.00-14.00	0.10-0.15	0.0-2.9	0.5-2.0	.28	.28	5	6	48
	5-41	10-40	0-40	35-50	1.35-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.5-1.0	.32	.32			
	41-55	10-40	0-40	45-70	1.30-1.55	0.01-0.42	0.10-0.15	6.0-8.9	0.1-0.5	.32	.32			
	55-80	20-50	20-40	15-35	1.30-1.60	0.00-0.00	0.10-0.15	6.0-8.9	0.1-0.3	.32	.32			
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded														
Conecuh	0-5	—	—	7-25	1.40-1.60	4.00-14.00	0.10-0.15	0.0-2.9	0.5-2.0	.28	.28	5	6	48
	5-41	—	—	35-50	1.35-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.5-1.0	.32	.32			
	41-55	—	—	45-70	1.30-1.55	0.01-0.42	0.10-0.15	6.0-8.9	0.1-0.5	.32	.32			
	55-80	—	—	28-40	1.30-1.60	0.00-0.00	0.10-0.15	6.0-8.9	0.1-0.3	.32	.32			
Luverne	0-9	50-70	10-30	7-20	1.35-1.65	14.00-42.00	0.11-0.15	0.0-2.9	0.5-1.5	.24	.24	5	3	86
	9-20	20-40	10-40	35-50	1.25-1.55	1.40-4.00	0.12-0.18	3.0-5.9	0.1-0.8	.28	.28			
	20-48	20-50	20-50	20-40	1.35-1.65	1.40-4.00	0.12-0.18	0.0-2.9	0.1-0.5	.28	.28			
	48-80	50-70	5-25	10-35	1.35-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.3	.28	.28			
FaA—Fluvaquents, ponded														
Fluvaquents	0-6	50-70	0-40	2-18	1.25-1.35	14.00-42.00	0.10-0.15	0.0-2.9	3.0-10.0	.20	.20	5	3	86
	6-80	0-70	—	15-45	1.35-1.60	0.42-1.40	0.10-0.20	0.0-2.9	0.5-1.0	.37	.37			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes														
Fullerton	0-6	10-40	50-80	15-27	1.45-1.55	4.00-14.00	0.10-0.16	0.0-2.9	0.5-2.0	.28	.32	5	6	48
	6-28	0-20	50-80	23-35	1.45-1.55	4.00-14.00	0.10-0.15	0.0-2.9	0	.24	.28			
	28-40	0-20	35-60	40-70	1.45-1.55	4.00-14.00	0.10-0.14	3.0-5.9	0	.20	.24			
	40-80	10-30	10-40	40-70	1.45-1.55	4.00-14.00	0.10-0.14	3.0-5.9	0	.20	.24			
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes														
Gorgas	0-5	70-90	0-20	0-10	1.45-1.70	14.00-42.00	0.05-0.10	0.0-2.9	0.5-2.0	.17	.24	1	8	0
	5-9	50-70	0-25	10-25	1.50-1.70	14.00-42.00	0.08-0.15	0.0-2.9	0.0-0.5	.17	.24			
	9-17	50-70	0-25	10-25	1.50-1.70	14.00-42.00	0.08-0.15	0.0-2.9	0.0-0.5	.17	.24			
	17-80	—	—	—	—	0.00-0.07	—	—	0					
Rock outcrop	0-80	—	—	—	—	0.00-0.01	0.00-0.00	—	—				8	0
LdA—Lucedale sandy loam, 0 to 2 percent slopes														
Lucedale	0-4	50-70	0-40	1-10	1.40-1.55	4.00-14.00	0.15-0.20	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	4-75	50-70	0-25	20-30	1.55-1.70	4.00-14.00	0.14-0.18	0.0-2.9	0	.24	.24			
	75-80	50-70	0-25	20-30	1.55-1.70	4.00-14.00	0.14-0.18	0.0-2.9	0	.24	.24			
LdB—Lucedale sandy loam, 2 to 5 percent slopes														
Lucedale	0-4	50-70	0-40	1-10	1.40-1.55	4.00-14.00	0.15-0.20	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	4-75	50-70	0-25	20-30	1.55-1.70	4.00-14.00	0.14-0.18	0.0-2.9	0	.24	.24			
	75-80	50-70	0-25	20-30	1.55-1.70	4.00-14.00	0.14-0.18	0.0-2.9	0	.24	.24			
LnB—Luverne sandy loam, 2 to 5 percent slopes														
Luverne	0-9	50-70	10-30	7-20	1.35-1.65	14.00-42.00	0.11-0.15	0.0-2.9	0.5-1.5	.24	.24	5	3	86
	9-20	20-40	10-40	35-50	1.25-1.55	1.40-4.00	0.12-0.18	3.0-5.9	0.1-0.8	.28	.28			
	20-48	20-50	20-50	20-40	1.35-1.65	1.40-4.00	0.12-0.18	0.0-2.9	0.1-0.5	.28	.28			
	48-80	50-70	5-25	10-35	1.35-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.3	.28	.28			
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes														
Luverne	0-9	50-70	10-30	7-20	1.35-1.65	14.00-42.00	0.11-0.15	0.0-2.9	0.5-1.5	.24	.24	5	3	86
	9-20	20-40	10-40	35-50	1.25-1.55	1.40-4.00	0.12-0.18	3.0-5.9	0.1-0.8	.28	.28			
	20-48	20-50	20-50	20-40	1.35-1.65	1.40-4.00	0.12-0.18	0.0-2.9	0.1-0.5	.28	.28			
	48-80	50-70	5-25	10-35	1.35-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.3	.28	.28			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes														
Luverne	0-9	50-70	10-30	7-20	1.35-1.65	14.00-42.00	0.11-0.15	0.0-2.9	0.5-1.5	.24	.24	5	3	86
	9-20	20-40	10-40	35-50	1.25-1.55	1.40-4.00	0.12-0.18	3.0-5.9	0.1-0.8	.28	.28			
	20-48	20-50	20-50	20-40	1.35-1.65	1.40-4.00	0.12-0.18	0.0-2.9	0.1-0.5	.28	.28			
	48-80	50-70	5-25	10-35	1.35-1.65	1.40-4.00	0.05-0.10	0.0-2.9	0.1-0.3	.28	.28			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded														
Mantachie	0-12	50-70	10-51	10-20	1.30-1.50	4.00-14.00	0.16-0.20	0.0-2.9	1.0-5.0	.37	.37	5	3	86
	12-80	30-70	10-30	18-35	1.30-1.50	4.00-14.00	0.14-0.20	0.0-2.9	0	.28	.28			
Iuka	0-15	50-70	0-30	6-15	1.30-1.50	14.00-42.00	0.10-0.15	0.0-2.9	0.5-2.0	.24	.24	5	3	86
	15-46	50-75	0-30	8-18	1.35-1.50	4.00-14.00	0.10-0.20	0.0-2.9	0	.28	.28			
	46-80	30-55	30-45	5-28	1.35-1.50	4.00-14.00	0.10-0.20	0.0-2.9	0	.20	.20			
Kinston	0-10	30-50	30-50	5-27	1.30-1.50	14.00-42.00	0.14-0.20	0.0-2.9	2.0-5.0	.24	.24	5	5	56
	10-80	30-70	0-30	18-35	1.30-1.50	4.00-14.00	0.14-0.18	0.0-2.9	0.0-3.0	.28	.28			
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded														
Maubila	0-4	30-50	30-50	8-25	1.45-1.65	14.00-42.00	0.08-0.12	0.0-2.9	0.5-1.0	.24	.24	4	5	56
	4-27	10-30	0-40	35-60	1.40-1.60	1.40-4.00	0.10-0.15	3.0-5.9	0	.28	.28			
	27-32	30-70	10-25	28-35	1.40-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0	.32	.32			
	32-42	5-25	40-60	35-60	1.40-1.60	0.01-0.42	0.05-0.10	3.0-5.9	0	.32	.32			
	42-80	10-30	0-40	40-60	1.40-1.60	0.01-0.42	0.10-0.15	3.0-5.9	0	.32	.32			
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes														
Maubila	0-4	30-50	30-50	8-25	1.45-1.65	14.00-42.00	0.08-0.12	0.0-2.9	0.5-1.0	.24	.24	4	5	56
	4-27	10-30	0-40	35-60	1.40-1.60	1.40-4.00	0.10-0.15	3.0-5.9	0	.28	.28			
	27-32	30-70	10-25	28-35	1.40-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0	.32	.32			
	32-42	5-25	40-60	35-60	1.40-1.60	0.01-0.42	0.05-0.10	3.0-5.9	0	.32	.32			
	42-80	10-30	0-40	40-60	1.40-1.60	0.01-0.42	0.10-0.15	3.0-5.9	0	.32	.32			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
Boykin	0-4	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	4-31	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.20	.20			
	31-80	50-80	0-25	18-30	1.45-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes														
Maubila	0-4	30-50	30-50	8-25	1.45-1.65	14.00-42.00	0.08-0.12	0.0-2.9	0.5-1.0	.24	.24	4	5	56
	4-27	10-30	0-40	35-60	1.40-1.60	1.40-4.00	0.10-0.15	3.0-5.9	0	.28	.28			
	27-32	30-70	10-25	28-35	1.40-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0	.32	.32			
	32-42	5-25	40-60	35-60	1.40-1.60	0.01-0.42	0.05-0.10	3.0-5.9	0	.32	.32			
	42-80	10-30	0-40	40-60	1.40-1.60	0.01-0.42	0.10-0.15	3.0-5.9	0	.32	.32			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes														
Maubila	0-4	30-50	30-50	8-25	1.45-1.65	14.00-42.00	0.08-0.12	0.0-2.9	0.5-1.0	.24	.24	4	5	56
	4-27	10-30	0-40	35-60	1.40-1.60	1.40-4.00	0.10-0.15	3.0-5.9	0	.28	.28			
	27-32	30-70	10-25	28-35	1.40-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0	.32	.32			
	32-42	5-25	40-60	35-60	1.40-1.60	0.01-0.42	0.05-0.10	3.0-5.9	0	.32	.32			
	42-80	10-30	0-40	40-60	1.40-1.60	0.01-0.42	0.10-0.15	3.0-5.9	0	.32	.32			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
MtA—Minter silty clay loam, ponded														
Minter	0-10	10-25	40-70	25-35	1.40-1.60	0.42-1.40	0.11-0.19	3.0-5.9	2.0-5.0	.32	.32	5	7	38
	10-18	20-50	20-50	28-50	1.35-1.65	0.42-1.40	0.08-0.18	3.0-5.9	0.1-0.5	.32	.32			
	18-72	0-30	20-50	35-60	1.35-1.65	0.42-1.40	0.08-0.18	3.0-5.9	0.1-0.5	.32	.32			
	72-80	20-70	10-50	20-50	1.35-1.65	0.42-1.40	0.08-0.18	3.0-5.9	0.1-0.5	.32	.32			
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes														
Minvale	0-7	20-30	50-80	15-30	1.30-1.45	14.00-42.00	0.14-0.18	0.0-2.9	0.5-2.0	.28	.37	5	6	48
	7-17	15-40	40-80	15-35	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32			
	17-37	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
	37-80	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes														
Minvale	0-7	20-30	50-80	15-30	1.30-1.45	14.00-42.00	0.14-0.18	0.0-2.9	0.5-2.0	.28	.37	5	6	48
	7-17	15-40	40-80	15-35	1.40-1.55	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.28	.32			
	17-37	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			
	37-80	0-20	40-70	25-45	1.40-1.55	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.28	.32			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
MW—Miscellaneous water														
Water	—	—	—	—	—	—	—	—	—					
MwF—Montevallo-Townley complex, 15 to 35 percent slopes														
Montevallo	0-2	10-40	50-80	7-27	1.25-1.45	4.00-14.00	0.09-0.18	0.0-2.9	0.5-2.0	.28	.32	2	5	56
	2-16	10-40	50-80	15-35	1.25-1.50	4.00-14.00	0.02-0.12	0.0-2.9	0.0-0.5	.32	.32			
	16-80	—	—	—	—	0.00-4.00	—	—	—					
Townley	0-12	20-40	50-80	10-27	1.30-1.60	4.00-14.00	0.12-0.14	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	12-25	0-10	40-60	35-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	25-35	0-10	40-70	25-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	35-80	—	—	—	—	0.00-1.40	0.00-0.00	0	0					
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded														
Myatt	0-4	50-70	10-25	7-20	1.30-1.60	4.00-14.00	0.11-0.20	0.0-2.9	0.5-4.0	.28	.28	5	3	86
	4-36	30-70	0-30	18-35	1.30-1.50	1.40-14.00	0.12-0.20	0.0-2.9	0.0-0.5	.28	.28			
	36-80	30-50	30-50	7-30	1.30-1.50	1.40-14.00	0.10-0.20	0.0-2.9	0	.24	.32			
NaC—Nauvoo sandy loam, 2 to 8 percent slopes														
Nauvoo	0-6	50-70	0-30	10-25	1.30-1.60	14.00-42.00	0.13-0.17	0.0-2.9	0.5-2.0	.28	.28	4	3	86
	6-13	50-70	0-30	10-20	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	13-40	25-50	10-40	18-38	1.30-1.60	4.00-14.00	0.14-0.20	0.0-2.9	0.0-0.5	.32	.32			
	40-55	50-70	0-25	15-30	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	55-80	—	—	—	—	0.42-1.40	—	—	—					
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded														
Ochlockonee	0-7	70-90	5-15	3-15	1.40-1.60	14.00-42.00	0.07-0.14	0.0-2.9	0.5-2.0	.20	.20	5	2	134
	7-26	50-90	15-25	0-12	1.40-1.60	4.00-14.00	0.10-0.20	0.0-2.9	0.5-1.0	.20	.20			
	26-80	70-88	0-15	3-18	1.40-1.70	14.00-42.00	0.06-0.12	0.0-2.9	0.5-1.0	.17	.17			
Riverview	0-7	50-70	10-50	8-27	1.30-1.60	4.00-14.00	0.16-0.24	0.0-2.9	0.5-2.0	.32	.32	5	3	86
	7-30	50-70	10-30	18-35	1.20-1.40	4.00-14.00	0.15-0.22	0.0-2.9	0.5-1.0	.24	.24			
	30-80	50-90	10-30	4-18	1.20-1.50	14.00-42.00	0.07-0.11	0.0-2.9	0.5-1.0	.17	.17			
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes														
Palmerdale	0-4	10-40	50-80	10-35	1.40-1.80	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.24	.32	5	6	48
	4-80	10-40	40-80	10-35	1.35-1.80	14.00-42.00	0.04-0.10	0.0-2.9	0	.24	.28			
Brilliant	0-4	10-40	50-80	8-25	1.40-1.80	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.24	.28	5	6	48
	4-42	10-50	40-80	8-25	1.35-1.80	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.24	.28			
	42-80	5-50	40-70	8-35	1.35-1.80	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.24	.28			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
Pt—Pits-Udorthents complex														
Pits	—	—	—	—	—	—	—	—	—				8	0
Udorthents	0-80	50-75	10-30	4-20	1.40-1.70	14.00-141.00	0.05-0.10	0.0-2.9	0	.24	.24	5	8	0
Ql—Quarry, limestone														
Quarry, limestone	—	—	—	—	—	—	—	—	—				8	0
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes														
Rock outcrop	0-80	—	—	—	—	0.00-0.01	0.00-0.00	—	—				8	0
Barfield	0-6	0-30	50-80	10-25	1.50-1.62	1.40-4.00	0.10-0.15	3.0-5.9	0.5-3.0	.17	.24	1	4	86
	6-13	0-20	10-40	35-65	1.55-1.65	1.40-4.00	0.09-0.14	6.0-8.9	0.1-0.5	.17	.24			
	13-80	—	—	—	—	0.00-0.00	—	—	—					
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes														
Saffell	0-5	50-70	0-40	5-20	1.35-1.60	14.00-42.00	0.07-0.17	0.0-2.9	1.0-2.0	.20	.24	5	3	86
	5-10	50-75	0-40	10-20	1.35-1.60	4.00-14.00	0.06-0.15	0.0-2.9	0.5-1.0	.28	.24			
	10-42	50-70	0-30	12-35	1.35-1.60	4.00-14.00	0.06-0.12	0.0-2.9	0.0-0.5	.28	.32			
	42-80	50-80	0-40	10-25	1.40-1.65	4.00-42.00	0.04-0.11	0.0-2.9	0.0-0.5	.17	.20			
ShA—Savannah silt loam, 0 to 2 percent slopes														
Savannah	0-7	20-40	50-80	3-16	1.50-1.60	4.00-14.00	0.13-0.16	0.0-2.9	0.5-3.0	.24	.24	4	3	86
	7-20	30-50	20-50	18-32	1.45-1.65	4.00-14.00	0.11-0.17	0.0-2.9	0.1-0.5	.28	.28			
	20-51	30-50	20-50	18-32	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
	51-70	20-50	20-50	18-40	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
	70-80	20-50	20-50	18-40	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
ShB—Savannah silt loam, 2 to 5 percent slopes														
Savannah	0-7	20-40	50-80	3-16	1.50-1.60	4.00-14.00	0.13-0.16	0.0-2.9	0.5-3.0	.24	.24	4	3	86
	7-20	30-50	20-50	18-32	1.45-1.65	4.00-14.00	0.11-0.17	0.0-2.9	0.1-0.5	.28	.28			
	20-51	30-50	20-50	18-32	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
	51-70	20-50	20-50	18-40	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
	70-80	20-50	20-50	18-40	1.60-1.80	1.40-4.00	0.05-0.10	0.0-2.9	0	.24	.24			
SmC—Smithdale sandy loam, 2 to 8 percent slopes														
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
SmD—Smithdale sandy loam, 5 to 15 percent slopes														
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes														
Sipsey	0-15	50-70	0-30	10-25	1.30-1.60	14.00-42.00	0.13-0.17	0.0-2.9	0.5-2.0	.28	.28	4	3	86
	15-33	30-70	0-40	18-35	1.30-1.60	4.00-14.00	0.14-0.20	0.0-2.9	0.5-1.0	.32	.32			
	33-80	—	—	—	—	0.42-1.40	—	—	—					
Nauvoo	0-6	50-70	0-30	10-25	1.30-1.60	14.00-42.00	0.13-0.17	0.0-2.9	0.5-2.0	.28	.28	4	3	86
	6-13	50-70	0-30	10-20	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	13-40	25-50	10-40	18-38	1.30-1.60	4.00-14.00	0.14-0.20	0.0-2.9	0.0-0.5	.32	.32			
	40-55	50-70	0-25	15-30	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	55-80	—	—	—	—	0.42-1.40	—	—	—					
Townley	0-12	20-40	50-80	10-27	1.30-1.60	4.00-14.00	0.12-0.14	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	12-25	0-10	40-60	35-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	25-35	0-10	40-70	25-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	35-80	—	—	—	—	0.00-1.40	0.00-0.00	0	0					
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes														
Sipsey	0-15	50-70	0-30	10-25	1.30-1.60	14.00-42.00	0.13-0.17	0.0-2.9	0.5-2.0	.28	.28	4	3	86
	15-33	40-70	0-40	18-35	1.30-1.60	4.00-14.00	0.14-0.20	0.0-2.9	0.5-1.0	.32	.32			
	33-80	—	—	—	—	0.42-1.40	—	—	—					
Nauvoo	0-6	50-70	0-30	10-25	1.30-1.60	14.00-42.00	0.13-0.17	0.0-2.9	0.5-2.0	.28	.28	4	3	86
	6-13	50-70	0-30	10-20	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	13-40	25-50	10-40	18-38	1.30-1.60	4.00-14.00	0.14-0.20	0.0-2.9	0.0-0.5	.32	.32			
	40-55	50-70	0-25	15-30	1.30-1.60	4.00-14.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
	55-80	—	—	—	—	0.42-1.40	—	—	—					
Sunlight	0-6	50-70	0-40	7-27	1.25-1.45	4.00-14.00	0.09-0.18	0.0-2.9	0.5-2.0	.28	.32	2	5	56
	6-12	30-50	25-50	15-35	1.25-1.50	4.00-14.00	0.02-0.12	0.0-2.9	0.0-0.5	.32	.32			
	12-80	—	—	—	—	0.42-1.40	—	—	0					

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery														
Talbott	0-12	0-20	40-70	27-40	1.35-1.55	4.00-14.00	0.10-0.16	3.0-5.9	0.5-1.0	.32	.32	2	6	48
	12-25	0-20	30-60	40-60	1.30-1.50	1.40-4.00	0.10-0.14	3.0-5.9	0.0-0.5	.24	.24			
	25-30	0-30	20-40	40-60	1.30-1.50	1.40-4.00	0.09-0.13	3.0-5.9	0.0-0.5	.24	.24			
	30-80	—	—	—	—	0.00-1.00	0.00-0.00	0	0					
ToB—Townley silt loam, 2 to 6 percent slopes														
Townley	0-12	20-40	50-80	10-27	1.30-1.60	4.00-14.00	0.12-0.14	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	12-25	0-10	40-60	35-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	25-35	0-10	40-70	25-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	35-80	—	—	—	—	0.00-1.40	0.00-0.00	0	0					
ToD—Townley silt loam, 6 to 15 percent slopes														
Townley	0-12	20-40	50-80	10-27	1.30-1.60	4.00-14.00	0.12-0.14	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	12-25	0-10	40-60	35-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	25-35	0-10	40-70	25-60	1.30-1.60	0.42-1.40	0.12-0.18	3.0-5.9	0.0-0.5	.28	.32			
	35-80	—	—	—	—	0.00-1.40	0.00-0.00	0	0					
Ur—Urban land														
Urban land	—	—	—	—	—	—	—	—	—					
W—Water														
Water	—	—	—	—	—	—	—	—	—					
WbF—Wadley-Boykin complex, 15 to 35 percent slopes														
Boykin	0-4	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	4-31	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.20	.20			
	31-80	50-80	0-25	18-30	1.45-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
Wadley	0-10	70-90	0-20	2-6	1.35-1.65	42.00-141.00	0.07-0.12	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	10-44	70-90	0-20	2-6	1.35-1.65	42.00-141.00	0.07-0.12	0.0-2.9	0.5-1.0	.15	.15			
	44-80	50-70	10-35	8-25	1.55-1.65	4.00-14.00	0.10-0.13	0.0-2.9	0.0-0.5	.20	.20			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*In/In*	*Pct*	*Pct*					
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes														
Wadley	0-10	70-90	0-20	2-6	1.35-1.65	42.00-141.00	0.07-0.12	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	10-44	70-90	0-20	2-6	1.35-1.65	42.00-141.00	0.07-0.12	0.0-2.9	0.5-1.0	.15	.15			
	44-80	50-70	10-30	13-28	1.55-1.65	4.00-14.00	0.10-0.13	0.0-2.9	0.0-0.5	.20	.20			
Smithdale	0-12	50-70	0-30	2-15	1.40-1.50	14.00-42.00	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	12-43	48-70	0-30	18-33	1.40-1.55	4.00-14.00	0.15-0.17	0.0-2.9	0	.24	.24			
	43-80	50-70	0-30	12-25	1.40-1.55	14.00-42.00	0.14-0.16	0.0-2.9	0	.28	.28			
Boykin	0-4	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	4-31	70-90	0-15	3-10	1.40-1.60	42.00-141.00	0.05-0.09	0.0-2.9	0.1-0.5	.20	.20			
	31-80	50-80	0-25	18-30	1.45-1.70	4.00-14.00	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded														
Wilcox	0-4	0-30	0-40	40-70	1.25-1.45	0.42-1.40	0.18-0.20	6.0-8.9	0.5-2.0	.37	.37	4	4	86
	4-46	0-30	0-40	60-85	1.25-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.3-0.8	.28	.28			
	46-80	—	—	—	—	0.00-0.42	0.00-0.00	0	0	.28	.28			
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded														
Wilcox	0-4	0-30	0-40	40-70	1.25-1.45	0.42-1.40	0.18-0.20	6.0-8.9	0.5-2.0	.37	.37	4	4	86
	4-46	0-30	0-40	60-85	1.25-1.35	0.01-0.42	0.15-0.18	6.0-8.9	0.3-0.8	.28	.28			
	46-80	—	—	—	—	0.00-0.42	0.00-0.00	0	0	.28	.28			
Boswell	0-5	50-70	5-40	5-20	1.40-1.55	4.00-14.00	0.15-0.20	0.0-2.9	1.0-4.0	.28	.28	5	3	86
	5-10	30-50	25-50	5-25	1.40-1.55	4.00-14.00	0.15-0.20	0.0-2.9	1.0-4.0	.28	.28			
	10-41	10-30	0-40	38-60	1.30-1.60	0.01-0.42	0.14-0.18	6.0-8.9	0	.32	.32			
	41-73	10-30	0-40	38-60	1.30-1.60	0.01-0.42	0.14-0.18	6.0-8.9	0	.32	.32			
	73-80	10-50	0-40	30-60	1.30-1.60	0.01-0.42	0.14-0.18	6.0-8.9	0	.32	.32			

Table 18.—Chemical Soil Properties

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded					
Annemaine	0-4	3.6-7.2	—	4.5-6.5	0
	4-17	—	8.4-12	4.5-5.5	0
	17-35	—	5.9-15	4.5-5.5	0
	35-48	—	4.2-8.4	4.5-5.5	0
	48-80	—	1.1-5.9	4.5-5.5	0
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded					
Annemaine	0-4	3.6-7.2	—	4.5-6.5	0
	4-17	—	8.4-12	4.5-5.5	0
	17-35	—	5.9-15	4.5-5.5	0
	35-48	—	4.2-8.4	4.5-5.5	0
	48-80	—	1.1-5.9	4.5-5.5	0
BaA—Bama fine sandy loam, 0 to 2 percent slopes					
Bama	0-10	—	0.1-2.2	4.5-6.0	0
	10-72	—	0.6-4.0	4.5-5.5	0
	72-80	—	0.5-3.0	4.5-5.5	0
BaB—Bama fine sandy loam, 2 to 5 percent slopes					
Bama	0-10	—	0.1-2.2	4.5-6.0	0
	10-72	—	0.6-4.0	4.5-5.5	0
	72-80	—	0.5-3.0	4.5-5.5	0
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded					
Bibb	0-8	—	4.0-7.0	3.6-5.5	0
	8-55	—	4.0-10	3.6-5.5	0
	55-80	—	4.0-10	3.6-5.5	0
Iuka	0-15	3.2-8.2	—	5.1-6.0	0
	15-46	—	3.3-8.4	4.5-5.5	0
	46-80	—	1.9-14	4.5-5.5	0
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony					
Bodine	0-14	—	1.4-3.7	3.6-5.5	0
	14-38	—	0.9-5.9	3.6-5.5	0
	38-58	—	2.9-5.9	3.6-5.5	0
	58-80	—	4.5-9.2	3.6-5.5	0
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony					
Bodine	0-14	—	1.4-3.7	3.6-5.5	0
	14-38	—	0.9-5.9	3.6-5.5	0
	38-58	—	2.9-5.9	3.6-5.5	0
	58-80	—	4.5-9.2	3.6-5.5	0
Minvale	0-7	—	1.5-6.0	4.5-5.5	0
	7-17	—	1.5-8.0	4.5-5.5	0
	17-37	—	2.0-8.0	4.5-5.5	0
	37-80	—	2.0-8.0	4.5-5.5	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony					
Bodine	0-14	—	1.4-3.7	3.6-5.5	0
	14-38	—	0.9-5.9	3.6-5.5	0
	38-58	—	2.9-5.9	3.6-5.5	0
	58-80	—	4.5-9.2	3.6-5.5	0
Minvale	0-7	—	1.5-6.0	4.5-5.5	0
	7-17	—	1.5-8.0	4.5-5.5	0
	17-37	—	2.0-8.0	4.5-5.5	0
	37-80	—	2.0-8.0	4.5-5.5	0
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded					
Cahaba	0-13	—	1.2-3.3	4.5-6.0	0
	13-44	—	4.2-8.4	4.5-6.0	0
	44-80	—	0.9-4.7	4.5-6.0	0
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded					
Cahaba	0-13	—	1.2-3.3	4.5-6.0	0
	13-44	—	4.2-8.4	4.5-6.0	0
	44-80	—	0.9-4.7	4.5-6.0	0
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded					
Choccolocco	0-8	—	1.2-4.7	4.5-6.0	0
	8-45	—	5.1-8.4	4.5-6.0	0
	45-57	—	0.4-4.2	4.5-6.0	0
	57-80	—	1.1-3.5	4.5-6.0	0
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded					
Columbus	0-9	—	1.7-2.8	4.5-5.5	0
	9-18	—	3.5-8.4	4.5-5.5	0
	18-42	—	3.5-8.4	4.5-5.5	0
	42-54	—	0.9-4.2	4.5-5.5	0
	54-80	—	4.9-8.4	4.5-5.5	0
CoA—Colwell sandy loam, 0 to 2 percent slopes					
Colwell	0-7	—	5.0-12	4.5-6.0	0
	7-10	—	5.0-12	4.5-6.0	0
	10-80	—	4.0-12	4.5-6.0	0
CoB—Colwell sandy loam, 2 to 5 percent slopes					
Colwell	0-7	—	5.0-12	4.5-6.0	0
	7-10	—	5.0-12	4.5-6.0	0
	10-80	—	4.0-12	4.5-6.0	0
CuB—Conecuh sandy loam, 2 to 5 percent slopes					
Conecuh	0-5	—	2.0-5.0	3.6-5.5	0
	5-41	—	12-30	3.6-5.5	0
	41-55	—	12-30	3.6-5.5	0
	55-80	—	10-25	3.6-5.5	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded					
Conecuh	0-5	—	2.0-5.0	3.6-5.5	0
	5-41	—	12-30	3.6-5.5	0
	41-55	—	12-30	3.6-5.5	0
	55-80	—	10-25	3.6-5.5	0
Luverne	0-9	—	1.0-6.0	3.6-5.5	0
	9-20	—	5.0-20	3.6-5.5	0
	20-48	—	5.0-20	3.6-5.5	0
	48-80	—	4.0-20	3.6-5.5	0
FaA—Fluvaquents, ponded					
Fluvaquents	0-6	—	1.6-15	3.6-5.5	0
	6-80	—	4.0-13	3.6-5.5	0
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes					
Fullerton	0-6	—	3.0-6.0	4.5-5.5	0
	6-28	—	5.0-7.0	4.5-5.5	0
	28-40	—	5.0-9.0	4.5-5.5	0
	40-80	—	5.0-9.0	4.5-5.5	0
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes					
Gorgas	0-5	0.0-2.0	—	4.5-6.5	0
	5-9	—	0.4-3.1	4.5-5.5	0
	9-17	—	0.4-3.1	4.5-5.5	0
	17-80	—	—	—	0
Rock outcrop	0-80	—	—	—	0
LdA—Lucedale sandy loam, 0 to 2 percent slopes					
Lucedale	0-4	0.2-2.0	—	5.1-6.5	0
	4-75	—	0.7-3.6	4.5-5.5	0
	75-80	—	0.7-3.6	4.5-5.5	0
LdB—Lucedale sandy loam, 2 to 5 percent slopes					
Lucedale	0-4	0.2-2.0	—	5.1-6.5	0
	4-75	—	0.7-3.6	4.5-5.5	0
	75-80	—	0.7-3.6	4.5-5.5	0
LnB—Luverne sandy loam, 2 to 5 percent slopes					
Luverne	0-9	—	1.0-6.0	3.6-5.5	0
	9-20	—	5.0-20	3.6-5.5	0
	20-48	—	5.0-20	3.6-5.5	0
	48-80	—	4.0-20	3.6-5.5	0
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes					
Luverne	0-9	—	1.0-6.0	3.6-5.5	0
	9-20	—	5.0-20	3.6-5.5	0
	20-48	—	5.0-20	3.6-5.5	0
	48-80	—	4.0-20	3.6-5.5	0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes					
Luverne	0-9	—	1.0-6.0	3.6-5.5	0
	9-20	—	5.0-20	3.6-5.5	0
	20-48	—	5.0-20	3.6-5.5	0
	48-80	—	4.0-20	3.6-5.5	0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded					
Mantachie	0-12	—	2.2-5.9	4.5-5.5	0
	12-80	—	8.4-18	4.5-5.5	0
Iuka	0-15	3.2-8.2	—	5.1-6.0	0
	15-46	—	3.3-8.4	4.5-5.5	0
	46-80	—	1.9-14	4.5-5.5	0
Kinston	0-10	—	3.0-11	4.5-6.0	0
	10-80	—	3.0-10	4.5-5.5	0
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded					
Maubila	0-4	—	1.1-4.5	3.6-5.5	0
	4-27	—	1.0-8.4	3.6-5.5	0
	27-32	—	2.3-5.1	3.6-5.5	0
	32-42	—	3.6-9.2	3.6-5.5	0
	42-80	—	1.1-8.4	3.6-5.5	0
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes					
Maubila	0-4	—	1.1-4.5	3.6-5.5	0
	4-27	—	1.0-8.4	3.6-5.5	0
	27-32	—	2.3-5.1	3.6-5.5	0
	32-42	—	3.6-9.2	3.6-5.5	0
	42-80	—	1.1-8.4	3.6-5.5	0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0
Boykin	0-4	—	0.7-2.9	4.5-6.0	0.0-2.0
	4-31	—	0.1-4.2	4.5-6.0	0.0-2.0
	31-80	—	1.0-4.0	4.5-5.5	0.0-2.0
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes					
Maubila	0-4	—	1.1-4.5	3.6-5.5	0
	4-27	—	1.0-8.4	3.6-5.5	0
	27-32	—	2.3-5.1	3.6-5.5	0
	32-42	—	3.6-9.2	3.6-5.5	0
	42-80	—	1.1-8.4	3.6-5.5	0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes					
Maubila	0-4	—	1.1-4.5	3.6-5.5	0
	4-27	—	1.0-8.4	3.6-5.5	0
	27-32	—	2.3-5.1	3.6-5.5	0
	32-42	—	3.6-9.2	3.6-5.5	0
	42-80	—	1.1-8.4	3.6-5.5	0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0
MtA—Minter silty clay loam, ponded					
Minter	0-10	—	4.3-6.4	4.5-5.5	0
	10-18	—	5.5-11	4.5-5.5	0
	18-72	—	6.9-13	4.5-5.5	0
	72-80	—	3.9-11	4.5-5.5	0
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes					
Minvale	0-7	—	1.5-6.0	4.5-5.5	0
	7-17	—	1.5-8.0	4.5-5.5	0
	17-37	—	2.0-8.0	4.5-5.5	0
	37-80	—	2.0-8.0	4.5-5.5	0
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes					
Minvale	0-7	—	1.5-6.0	4.5-5.5	0
	7-17	—	1.5-8.0	4.5-5.5	0
	17-37	—	2.0-8.0	4.5-5.5	0
	37-80	—	2.0-8.0	4.5-5.5	0
MW—Miscellaneous water					
Water	—	—	—	—	—
MwF—Montevallo-Townley complex, 15 to 35 percent slopes					
Montevallo	0-2	—	1.0-4.3	4.5-6.0	0
	2-16	—	1.8-5.2	4.5-6.0	0
	16-80	—	—	—	0
Townley	0-12	—	1.7-5.3	3.6-5.5	0
	12-25	—	6.9-15	3.6-5.5	0
	25-35	—	4.9-15	3.6-5.5	0
	35-80	—	—	—	0
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded					
Myatt	0-4	—	1.5-6.4	4.5-6.0	0
	4-36	—	5.7-18	3.6-5.5	0
	36-80	—	2.8-15	3.6-5.5	0
NaC—Nauvoo sandy loam, 2 to 8 percent slopes					
Nauvoo	0-6	—	1.7-4.9	4.5-6.0	0
	6-13	—	0.1-9.2	4.5-6.0	0
	13-40	—	3.5-9.2	4.5-6.0	0
	40-55	—	2.9-7.2	4.5-6.0	0
	55-80	—	—	—	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded					
Ochlockonee	0-7	1.6-8.2	—	4.5-6.5	0
	7-26	—	0.0-3.6	4.5-5.5	0
	26-80	—	0.7-5.7	4.5-5.5	0
Riverview	0-7	3.0-12	—	4.5-6.5	0
	7-30	—	4.0-10	4.5-6.0	0
	30-80	—	2.0-6.0	4.5-6.0	0
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes					
Palmerdale	0-4	—	2.9-18	3.6-5.5	0
	4-80	—	4.3-18	3.6-5.5	0
Brilliant	0-4	4.1-13	—	5.6-7.3	0
	4-42	4.1-13	—	5.6-7.3	0
	42-80	4.1-18	—	5.6-7.3	0
Pt—Pits-Udorthents complex					
Pits	—	—	—	—	—
Udorthents	0-80	—	0.9-4.7	4.5-6.0	0
Ql—Quarry, limestone					
Quarry, limestone	—	—	—	—	—
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes					
Rock outcrop	0-80	—	—	—	0
Barfield	0-6	8.5-22	—	6.1-7.8	0
	6-13	23-41	—	6.1-7.8	0
	13-80	—	—	—	0
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes					
Saffell	0-5	—	5.0-15	4.5-5.5	0
	5-10	—	5.0-20	4.5-5.5	0
	10-42	—	10-20	4.5-5.5	0
	42-80	—	5.0-15	4.5-5.5	0
ShA—Savannah silt loam, 0 to 2 percent slopes					
Savannah	0-7	—	0.5-3.1	3.6-5.5	0
	7-20	—	3.5-6.9	3.6-5.5	0
	20-51	—	4.2-7.7	3.6-5.5	0
	51-70	—	4.2-9.7	3.6-5.5	0
	70-80	—	4.2-9.7	3.6-5.5	0
ShB—Savannah silt loam, 2 to 5 percent slopes					
Savannah	0-7	—	0.5-3.1	3.6-5.5	0
	7-20	—	3.5-6.9	3.6-5.5	0
	20-51	—	4.2-7.7	3.6-5.5	0
	51-70	—	4.2-9.7	3.6-5.5	0
	70-80	—	4.2-9.7	3.6-5.5	0
SmC—Smithdale sandy loam, 2 to 8 percent slopes					
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0
SmD—Smithdale sandy loam, 5 to 15 percent slopes					
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes					
Sipsey	0-15	—	1.7-4.9	4.5-6.0	0
	15-33	—	3.3-6.9	4.5-6.0	0
	33-80	—	—	—	0
Nauvoo	0-6	—	1.7-4.9	4.5-6.0	0
	6-13	—	0.1-9.2	4.5-6.0	0
	13-40	—	3.5-9.2	4.5-6.0	0
	40-55	—	2.9-7.2	4.5-6.0	0
	55-80	—	—	—	0
Townley	0-12	—	1.7-5.3	3.6-5.5	0
	12-25	—	6.9-15	3.6-5.5	0
	25-35	—	4.9-15	3.6-5.5	0
	35-80	—	—	—	0
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes					
Sipsey	0-15	—	1.7-4.9	4.5-6.0	0
	15-33	—	3.3-6.9	4.5-6.0	0
	33-80	—	—	—	0
Nauvoo	0-6	—	1.7-4.9	4.5-6.0	0
	6-13	—	0.1-9.2	4.5-6.0	0
	13-40	—	3.5-9.2	4.5-6.0	0
	40-55	—	2.9-7.2	4.5-6.0	0
	55-80	—	—	—	0
Sunlight	0-6	—	1.2-5.3	4.5-6.0	0
	6-12	—	2.9-8.4	4.5-6.0	0
	12-80	—	—	—	0
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery					
Talbott	0-12	9.6-14	—	5.1-6.5	0
	12-25	13-21	—	5.1-6.5	0
	25-30	13-21	—	6.1-7.8	0
	30-80	—	—	—	0
ToB—Townley silt loam, 2 to 6 percent slopes					
Townley	0-12	—	1.7-5.3	3.6-5.5	0
	12-25	—	6.9-15	3.6-5.5	0
	25-35	—	4.9-15	3.6-5.5	0
	35-80	—	—	—	0
ToD—Townley silt loam, 6 to 15 percent slopes					
Townley	0-12	—	1.7-5.3	3.6-5.5	0
	12-25	—	6.9-15	3.6-5.5	0
	25-35	—	4.9-15	3.6-5.5	0
	35-80	—	—	—	0
Ur—Urban land					
Urban land	—	—	—	—	—
W—Water					
Water	—	—	—	—	—

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Salinity
	In	*meq/100g*	*meq/100g*	*pH*	*mmhos/cm*
WbF—Wadley-Boykin complex, 15 to 35 percent slopes					
Boykin	0-4	—	0.7-2.9	4.5-6.0	0.0-2.0
	4-31	—	0.1-4.2	4.5-6.0	0.0-2.0
	31-80	—	2.0-8.0	4.5-5.5	0.0-2.0
Wadley	0-10	—	2.0-6.0	4.5-6.0	0.0-2.0
	10-44	—	2.0-6.0	4.5-6.0	0.0-2.0
	44-80	—	5.0-20	4.5-6.0	0.0-2.0
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes					
Wadley	0-10	—	2.0-6.0	4.5-6.0	0.0-2.0
	10-44	—	2.0-6.0	4.5-6.0	0.0-2.0
	44-80	—	5.0-20	4.5-6.0	0.0-2.0
Smithdale	0-12	—	0.1-2.2	4.5-5.5	0
	12-43	—	0.6-4.0	4.5-5.5	0
	43-80	—	0.5-3.3	4.5-5.5	0
Boykin	0-4	—	0.7-2.9	4.5-6.0	0.0-2.0
	4-31	—	0.1-4.2	4.5-6.0	0.0-2.0
	31-80	—	2.0-8.0	4.5-5.5	0.0-2.0
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded					
Wilcox	0-4	—	20-42	4.5-5.5	0
	4-46	—	24-50	3.6-5.5	0
	46-80	—	—	3.6-5.5	0
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded					
Wilcox	0-4	—	20-42	4.5-5.5	0
	4-46	—	24-50	3.6-5.5	0
	46-80	—	—	3.6-5.5	0
Boswell	0-5	—	1.0-5.9	4.5-5.5	0
	5-10	—	1.0-7.7	4.5-5.5	0
	10-41	—	20-34	4.5-5.5	0
	41-73	—	20-34	4.5-5.5	0
	73-80	—	15-34	4.5-5.5	0

Table 19.—Water Features

[Estimates of the depth to a water table are listed by month. Estimates of the frequency of ponding and flooding are based on yearly probability but are listed for the individual months in which ponding and flooding are most likely to be a concern. Hydrologic group and surface runoff class are independent of the time of year. 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 unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded										
Annemaine	C	Medium	January	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			February	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			March	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			April	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			December	—	—	—	—	None	Very brief	Rare
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded										
Annemaine	C	Medium	January	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			February	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			March	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			April	1.5-2.5	>6.0	—	—	None	Very brief	Rare
			December	—	—	—	—	None	Very brief	Rare
BaA—Bama fine sandy loam, 0 to 2 percent slopes										
Bama	B	Low	Jan-Dec	—	—	—	—	None	—	None
BaB—Bama fine sandy loam, 2 to 5 percent slopes										
Bama	B	Low	Jan-Dec	—	—	—	—	None	—	None
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded										
Bibb	D	Very high	January	0.5-1.0	>6.0	—	—	None	Brief	Frequent
			February	0.5-1.0	>6.0	—	—	None	Brief	Frequent
			March	0.5-1.0	>6.0	—	—	None	Brief	Frequent
			April	0.5-1.0	>6.0	—	—	None	Brief	Frequent
			December	0.5-1.0	>6.0	—	—	None	Brief	Frequent
Iuka	C	Low	January	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			February	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			March	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			April	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			December	1.0-3.0	>6.0	—	—	None	Brief	Frequent

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony										
Bodine	B	Low	Jan-Dec	—	—	—	—	None	—	None
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony										
Bodine	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Minvale	B	High	Jan-Dec	—	—	—	—	None	—	None
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony										
Bodine	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Minvale	B	High	Jan-Dec	—	—	—	—	None	—	None
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded										
Cahaba	B	Low	January	—	—	—	—	None	Very brief	Rare
			February	—	—	—	—	None	Very brief	Rare
			March	—	—	—	—	None	Very brief	Rare
			April	—	—	—	—	None	Very brief	Rare
			December	—	—	—	—	None	Very brief	Rare
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded										
Cahaba	B	Low	January	—	—	—	—	None	Very brief	Rare
			February	—	—	—	—	None	Very brief	Rare
			March	—	—	—	—	None	Very brief	Rare
			April	—	—	—	—	None	Very brief	Rare
			December	—	—	—	—	None	Very brief	Rare

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded										
Choccolocco	B	Low	January	—	—	—	—	None	Brief	Occasional
			February	—	—	—	—	None	Brief	Occasional
			March	—	—	—	—	None	Brief	Occasional
			April	—	—	—	—	None	Brief	Occasional
			May	—	—	—	—	None	Brief	Occasional
			June	—	—	—	—	None	Brief	Occasional
	B	Low	July	—	—	—	—	None	Brief	Occasional
			August	—	—	—	—	None	Brief	Occasional
			September	—	—	—	—	None	Brief	Occasional
			October	—	—	—	—	None	Brief	Occasional
			November	—	—	—	—	None	Brief	Occasional
			December	—	—	—	—	None	Brief	Occasional
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded										
Columbus	C	Low	January	2.0-3.0	>6.0	—	—	None	Brief	Occasional
	C	Low	February	2.0-3.0	>6.0	—	—	None	Brief	Occasional
	C	Low	March	2.0-3.0	>6.0	—	—	None	Brief	Occasional
	C	Low	April	2.0-3.0	>6.0	—	—	None	Brief	Occasional
	C	Low	December	2.0-3.0	>6.0	—	—	None	Brief	Occasional
CoA—Colwell sandy loam, 0 to 2 percent slopes										
Colwell	B	Low	Jan-Dec	—	—	—	—	None	—	None
CoB—Colwell sandy loam, 2 to 5 percent slopes										
Colwell	B	Low	Jan-Dec	—	—	—	—	None	—	None
CuB—Conecuh sandy loam, 2 to 5 percent slopes										
Conecuh	D	Medium	Jan-Dec	—	—	—	—	None	—	None
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded										
Conecuh	D	High	Jan-Dec	—	—	—	—	None	—	None
Luverne	C	High	Jan-Dec	—	—	—	—	None	—	None

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
FaA—Fluvaquents, ponded										
Fluvaquents	D	Negligible	January	0.0	>6.0	0.0-2.0	Very long	Frequent	Brief	Frequent
			February	0.0	>6.0	0.0-2.0	Very long	Frequent	Brief	Frequent
			March	0.0	>6.0	0.0-2.0	Very long	Frequent	Brief	Frequent
			April	0.0	>6.0	0.0-2.0	Very long	Frequent	Brief	Frequent
			May	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			June	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			July	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			August	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			September	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			October	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			November	0.0	>6.0	0.0-2.0	Very long	Frequent	—	—
			December	0.0	>6.0	0.0-2.0	Very long	Frequent	Brief	Frequent
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes										
Fullerton	B	Medium	Jan-Dec	—	—	—	—	None	—	None
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes										
Gorgas	D	Very high	Jan-Dec	—	—	—	—	None	—	None
Rock outcrop	D	Very high	Jan-Dec	—	—	—	—	None	—	None
LdA—Lucedale sandy loam, 0 to 2 percent slopes										
Lucedale	B	Low	Jan-Dec	—	—	—	—	None	—	None
LdB—Lucedale sandy loam, 2 to 5 percent slopes										
Lucedale	B	Low	Jan-Dec	—	—	—	—	None	—	None
LnB—Luverne sandy loam, 2 to 5 percent slopes										
Luverne	C	Low	Jan-Dec	—	—	—	—	None	—	None
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes										
Luverne	C	Medium	Jan-Dec	—	—	—	—	None	—	None
Smithdale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes										
Luverne	C	High	Jan-Dec	—	—	—	—	None	—	None
Smithdale	B	High	Jan-Dec	—	—	—	—	None	—	None

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	*Ft*	*Ft*				
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded										
Mantachie	C	Very high	January	1.0-1.5	>6.0	—	—	None	Brief	Frequent
			February	1.0-1.5	>6.0	—	—	None	Brief	Frequent
			March	1.0-1.5	>6.0	—	—	None	Brief	Frequent
			April	1.0-1.5	>6.0	—	—	None	Brief	Frequent
			December	1.0-1.5	>6.0	—	—	None	Brief	Frequent
Iuka	C	Low	January	1.5-3.0	>6.0	—	—	None	Brief	Frequent
			February	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			March	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			April	1.0-3.0	>6.0	—	—	None	Brief	Frequent
			December	1.0-3.0	>6.0	—	—	None	Brief	Frequent
Kinston	D	Very high	January	0.0-1.0	>6.0	—	—	None	Brief	Frequent
			February	0.0-1.0	>6.0	—	—	None	Brief	Frequent
			March	0.0-1.0	>6.0	—	—	None	Brief	Frequent
			April	0.0-1.0	>6.0	—	—	None	Brief	Frequent
			December	0.0-1.0	>6.0	—	—	None	Brief	Frequent
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded										
Maubila	C	High	January	2.0-3.5	2.7-3.5	—	—	None	—	None
			February	2.0-3.5	2.5-3.5	—	—	None	—	None
			March	2.0-3.5	2.5-3.5	—	—	None	—	None
			April	2.0-3.5	2.5-3.5	—	—	None	—	None
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes										
Maubila	C	High	January	2.0-3.5	2.7-3.5	—	—	None	—	None
Smithdale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Boykin	B	Medium	Jan-Dec	—	—	—	—	None	—	None
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes										
Maubila	C	Very high	January	2.0-3.5	2.7-3.5	—	—	None	—	None
Smithdale	B	High	Jan-Dec	—	—	—	—	None	—	None
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes										
Maubila	C	Very high	January	2.0-3.5	2.7-3.5	—	—	None	—	None
Smithdale	B	High	Jan-Dec	—	—	—	—	None	—	None

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
MtA—Minter silty clay loam, ponded										
Minter	D	Negligible	January	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	Brief	Frequent
			February	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	Brief	Frequent
			March	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	Brief	Frequent
			April	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	Brief	Frequent
			May	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	—	—
			June	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	—	—
			July	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	—	—
			August	0.0-1.0	>6.0	—	—	—	—	—
			September	0.0-1.0	>6.0	—	—	—	—	—
			October	0.0-1.0	>6.0	—	—	—	—	—
			November	0.0-1.0	>6.0	—	—	—	—	—
			December	0.0-1.0	>6.0	0.0-3.0	Very long	Frequent	Brief	Frequent
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes										
Minvale	B	Very low	Jan-Dec	—	—	—	—	None	—	None
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes										
Minvale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
MW—Miscellaneous water										
Water	—	—	—	—	—	—	—	—	—	None
MwF—Montevallo-Townley complex, 15 to 35 percent slopes										
Montevallo	D	Very high	Jan-Dec	—	—	—	—	None	—	None
Townley	C	Very high	Jan-Dec	—	—	—	—	None	—	None
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded										
Myatt	D	Very low	January	0.0-1.0	>6.0	—	—	None	Very brief	Rare
			February	0.0-1.0	>6.0	—	—	None	Very brief	Rare
			March	0.0-1.0	>6.0	—	—	None	Very brief	Rare
			April	0.0-1.0	>6.0	—	—	None	Very brief	Rare
			December	—	—	—	—	None	Very brief	Rare
NaC—Nauvoo sandy loam, 2 to 8 percent slopes										
Nauvoo	B	Medium	Jan-Dec	—	—	—	—	None	—	None

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded										
Ochlockonee	B	Low	January	3.0-5.0	>6.0	—	—	None	Brief	Frequent
			February	3.0-5.0	>6.0	—	—	None	Brief	Frequent
			March	3.0-5.0	>6.0	—	—	None	Brief	Frequent
			April	3.0-5.0	>6.0	—	—	None	Brief	Frequent
			December	—	—	—	—	None	Brief	Frequent
Riverview	B	Low	January	3.5-5.0	>6.0	—	—	None	Brief	Frequent
			February	3.5-5.0	>6.0	—	—	None	Brief	Frequent
			March	3.5-5.0	>6.0	—	—	None	Brief	Frequent
			April	3.5-5.0	>6.0	—	—	None	Brief	Frequent
			December	—	—	—	—	None	Brief	Frequent
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes										
Palmerdale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Brilliant	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Pt—Pits-Udorthents complex										
Pits	—	Very high	Jan-Dec	—	—	—	—	None	—	Variable
Udorthents	B	Very high	Jan-Dec	—	—	—	—	None	—	Variable
Ql—Quarry, limestone										
Quarry, limestone	—	Very high	Jan-Dec	—	—	—	—	None	—	None
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes										
Rock outcrop	D	Very high	Jan-Dec	—	—	—	—	None	—	None
Barfield	D	Very high	Jan-Dec	—	—	—	—	None	—	None
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes										
Saffell	B	Medium	Jan-Dec	—	—	—	—	None	—	None
ShA—Savannah silt loam, 0 to 2 percent slopes										
Savannah	C	Low	January	1.5-3.0	2.3-3.0	—	—	None	—	None
	C	Low	February	1.5-3.0	1.5-3.0	—	—	None	—	None
	C	Low	March	1.5-3.0	1.5-3.0	—	—	None	—	None
ShB—Savannah silt loam, 2 to 5 percent slopes										
Savannah	C	Medium	January	1.5-3.0	2.3-3.0	—	—	None	—	None
	C	Medium	February	1.5-3.0	1.5-3.0	—	—	None	—	None
	C	Medium	March	1.5-3.0	1.5-3.0	—	—	None	—	None

Table 19.—Water Features—Continued

Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	*Ft*	*Ft*				
SmC—Smithdale sandy loam, 2 to 8 percent slopes										
Smithdale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
SmD—Smithdale sandy loam, 5 to 15 percent slopes										
Smithdale	B	Medium	Jan-Dec	—	—	—	—	None	—	None
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes										
Sipsey	B	High	Jan-Dec	—	—	—	—	None	—	None
Nauvoo	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Townley	C	High	Jan-Dec	—	—	—	—	None	—	None
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes										
Sipsey	B	Very high	Jan-Dec	—	—	—	—	None	—	None
Nauvoo	B	High	Jan-Dec	—	—	—	—	None	—	None
Sunlight	D	Very high	Jan-Dec	—	—	—	—	None	—	None
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery										
Talbott	C	High	Jan-Dec	—	—	—	—	None	—	None
ToB—Townley silt loam, 2 to 6 percent slopes										
Townley	C	Medium	Jan-Dec	—	—	—	—	None	—	None
ToD—Townley silt loam, 6 to 15 percent slopes										
Townley	C	High	Jan-Dec	—	—	—	—	None	—	None
Ur—Urban land										
Urban land	—	—	Jan-Dec	—	—	—	—	None	—	Variable
W—Water										
Waterv	—	—	—	—	—	—	—	—	—	None
WbF—Wadley-Boykin complex, 15 to 35 percent slopes										
Boykin	B	Medium	Jan-Dec	—	—	—	—	None	—	None
Wadley	A	Medium	Jan-Dec	—	—	—	—	None	—	None
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes										
Wadley	A	Medium	Jan-Dec	—	—	—	—	None	—	None
Smithdale	B	High	Jan-Dec	—	—	—	—	None	—	None
Boykin	B	Medium	Jan-Dec	—	—	—	—	None	—	None
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded										
Wilcox	D	Medium	Jan-Apr	1.5-3.0	1.5-3.0	—	—	None	—	None
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded										
Wilcox	D	High	Jan-Dec	1.5-3.0	1.5-3.0	—	—	None	—	None
Boswell	D	High	Jan-Dec	—	—	—	—	None	—	None

Table 20.—Soil Features

Map symbol and soil name	Restrictive Layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		*In*	*In*			
AnA—Annemaine silt loam, 0 to 2 percent slopes, rarely flooded								
Annemaine		—		0	0	None	High	High
AnB—Annemaine silt loam, 2 to 5 percent slopes, rarely flooded								
Annemaine		—		0	0	None	High	High
BaA—Bama fine sandy loam, 0 to 2 percent slopes								
Bama		—		0	0	None	Low	Moderate
BaB—Bama fine sandy loam, 2 to 5 percent slopes								
Bama		—		0	0	None	Low	Moderate
BdA—Bibb-Iuka complex, 0 to 1 percent slopes, frequently flooded								
Bibb		—		0	0	None	High	Moderate
Iuka		—		0	0	None	Moderate	High
BoD—Bodine very gravelly silt loam, 6 to 15 percent slopes, stony								
Bodine		—		0	0	None	Low	High
BvF—Bodine-Minvale complex, 15 to 35 percent slopes, stony								
Bodine		—		0	0	None	Low	High
Minvale		—		0	0	None	Moderate	Low
BvG—Bodine-Minvale complex, 35 to 50 percent slopes, stony								
Bodine		—		0	0	None	Low	High
Minvale		—		0	0	None	Moderate	Low
CaA—Cahaba sandy loam, 0 to 2 percent slopes, rarely flooded								
Cahaba		—		0	0	None	Moderate	Moderate
CaB—Cahaba sandy loam, 2 to 5 percent slopes, rarely flooded								
Cahaba		—		0	0	None	Moderate	Moderate
CcA—Choccolocco silt loam, 0 to 2 percent slopes, occasionally flooded								
Choccolocco		—		0	0	None	Moderate	Moderate
CmA—Columbus loam, 0 to 2 percent slopes, occasionally flooded								
Columbus		—		0	0	None	High	High
CoA—Colwell sandy loam, 0 to 2 percent slopes								
Colwell		—		0	0	None	Moderate	High
CoB—Colwell sandy loam, 2 to 5 percent slopes								
Colwell		—		0	0	None	Moderate	High
CuB—Conecuh sandy loam, 2 to 5 percent slopes								
Conecuh		—		0	0	None	High	High
CvD2—Conecuh-Luverne complex, 5 to 15 percent slopes, eroded								
Conecuh		—		0	0	None	High	High
Luverne		—		0	0	None	High	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive Layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		*In*	*In*			
FaA—Fluvaquents, ponded								
Fluvaquents		—		0	0	None	High	High
FuD—Fullerton gravelly silt loam, 6 to 15 percent slopes								
Fullerton		—		0	0	None	High	Moderate
GrG—Gorgas-Rock outcrop complex, 35 to 60 percent slopes								
Gorgas	Lithic bedrock	10-20	Indurated	0	0	None	Low	Moderate
Rock outcrop	Lithic bedrock	0	Indurated	0	0	None		
LdA—Lucedale sandy loam, 0 to 2 percent slopes								
Lucedale		—		0	0	None	Moderate	Moderate
LdB—Lucedale sandy loam, 2 to 5 percent slopes								
Lucedale		—		0	0	None	Moderate	Moderate
LnB—Luverne sandy loam, 2 to 5 percent slopes								
Luverne		—		0	0	None	High	High
LsD—Luverne-Smithdale complex, 5 to 15 percent slopes								
Luverne		—		0	0	None	High	High
Smithdale		—		0	0	None	Low	Moderate
LsF—Luverne-Smithdale complex, 15 to 35 percent slopes								
Luverne		—		0	0	None	High	High
Smithdale		—		0	0	None	Low	Moderate
MIA—Mantachie, Iuka, and Kinston soils, 0 to 1 percent slopes, frequently flooded								
Mantachie		—		0	0	None	High	High
Iuka		—		0	0	None	Moderate	High
Kinston		—		0	0	None	High	High
MkC2—Maubila flaggy loam, 2 to 8 percent slopes, eroded								
Maubila		—		0	0	None	High	High
MsD—Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes								
Maubila		—		0	0	None	High	High
Smithdale		—		0	0	None	Low	Moderate
Boykin		—		0	0	None	Moderate	High
MsF—Maubila-Smithdale complex, 15 to 35 percent slopes								
Maubila		—		0	0	None	High	High
Smithdale		—		0	0	None	Low	Moderate
MsG—Maubila-Smithdale complex, 35 to 45 percent slopes								
Maubila		—		0	0	None	High	High
Smithdale		—		0	0	None	Low	Moderate
MtA—Minter silty clay loam, ponded								
Minter		—		0	0	None	High	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive Layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		*In*	*In*			
MvB—Minvale gravelly silt loam, 2 to 6 percent slopes								
Minvale		—		0	0	None	Moderate	Low
MvD—Minvale gravelly silt loam, 6 to 15 percent slopes								
Minvale		—		0	0	None	Moderate	Low
MW—Miscellaneous water								
Water		—		—	—			
MwF—Montevallo-Townley complex, 15 to 35 percent slopes								
Montevallo	Paralithic bedrock	10-20	Moderately cemented	0	0	None	Moderate	Moderate
Townley	Paralithic bedrock	20-40	Moderately cemented	0	0	None	Moderate	High
MyA—Myatt fine sandy loam, 0 to 1 percent slopes, rarely flooded								
Myatt		—		0	0	None	High	High
NaC—Nauvoo sandy loam, 2 to 8 percent slopes								
Nauvoo	Paralithic bedrock	40-60	Strongly cemented	0	0	None	Low	High
ObB—Ochlockonee-Riverview complex, gently undulating, frequently flooded								
Ochlockonee		—		0	0	None	Low	High
Riverview		—		0	0	None	Low	Moderate
PBF—Palmerdale and Brilliant soils, 6 to 45 percent slopes								
Palmerdale		—		0	0	None	Moderate	High
Brilliant		—		0	0	None	Low	Low
Pt—Pits-Udorthents complex								
Pits		—		0	0	None		
Udorthents		—		0	0	None	Low	Moderate
Ql—Quarry, limestone								
Quarry, limestone		—		0	0	None		
RbG—Rock outcrop-Barfield complex, 15 to 60 percent slopes								
Rock outcrop	Lithic bedrock	0	Indurated	0	0	None		
Barfield	Lithic bedrock	8-20	Strongly cemented	0	0	None	High	Low
SaD—Saffell gravelly sandy loam, 5 to 15 percent slopes								
Saffell		—		0	0	None	Low	Moderate
ShA—Savannah silt loam, 0 to 2 percent slopes								
Savannah	Fragipan	16-38	Noncemented	0	0	None	Moderate	High
ShB—Savannah silt loam, 2 to 5 percent slopes								
Savannah	Fragipan	16-38	Noncemented	0	0	None	Moderate	High
SmC—Smithdale sandy loam, 2 to 8 percent slopes								
Smithdale		—		0	0	None	Low	Moderate

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive Layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		*In*	*In*			
SmD—Smithdale sandy loam, 5 to 15 percent slopes								
Smithdale		—		0	0	None	Low	Moderate
SnD—Sipsey-Nauvoo-Townley complex, 6 to 15 percent slopes								
Sipsey	Paralithic bedrock	20-40	Very strongly cemented	0	0	None	Low	High
Nauvoo	Paralithic bedrock	40-60	Strongly cemented	0	0	None	Low	High
Townley	Paralithic bedrock	20-40	Moderately cemented	0	0	None	Moderate	High
SsF—Sipsey-Nauvoo-Sunlight complex, 15 to 35 percent slopes								
Sipsey	Paralithic bedrock	20-40	Very strongly cemented	0	0	None	Low	High
Nauvoo	Paralithic bedrock	40-60	Strongly cemented	0	0	None	Low	High
Sunlight	Paralithic bedrock	10-20	Strongly cemented	0	0	None	Moderate	Moderate
TaD—Talbott silt loam, 6 to 15 percent slopes, bouldery								
Talbott	Lithic bedrock	20-40	Indurated	0	0	None	High	Moderate
ToB—Townley silt loam, 2 to 6 percent slopes								
Townley	Paralithic bedrock	20-40	Moderately cemented	0	0	None	Moderate	High
ToD—Townley silt loam, 6 to 15 percent slopes								
Townley	Paralithic bedrock	20-40	Moderately cemented	0	0	None	Moderate	High
Ur—Urban land								
Urban land		—		—	—			
W—Water								
Water		—		—	—			
WbF—Wadley-Boykin complex, 15 to 35 percent slopes								
Boykin		—		0	0	None	Moderate	High
Wadley		—		0	0	None	Low	High
WdE—Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes								
Wadley		—		0	0	None	Low	High
Smithdale		—		0	0	None	Low	Moderate
Boykin		—		0	0	None	Moderate	High
WiB2—Wilcox clay loam, 2 to 5 percent slopes, eroded								
Wilcox	Paralithic bedrock	40-60	Moderately cemented	0	0	None	High	High
WwD2—Wilcox-Boswell complex, 5 to 15 percent slopes, eroded								
Wilcox	Paralithic bedrock	40-60	Moderately cemented	0	0	None	High	High
Boswell		—		0	0	None	High	Moderate

Table 21.—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 classification
Annemaine	Fine, mixed, semiactive, thermic Aquic Hapludults
Bama	Fine-loamy, siliceous, subactive, thermic Typic Paleudults
Barfield*	Clayey, mixed, active, thermic Lithic Hapludolls
Bibb	Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Bodine	Loamy-skeletal, siliceous, semiactive, thermic Typic Paleudults
Boswell	Fine, mixed, active, thermic Vertic Paleudalfs
Boykin	Loamy, siliceous, active, thermic Arenic Paleudults
Brilliant	Loamy-skeletal, mixed, active, nonacid, thermic Typic Udorthents
Cahaba	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Choccolocco	Fine-silty, mixed, semiactive, thermic Typic Hapludults
Columbus	Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults
Colwell	Fine, kaolinitic, thermic Rhodic Paleudults
Conecuh	Fine, smectitic, thermic Vertic Hapludults
Fluvaquents	Thermic Typic Fluvaquents
Fullerton	Fine, kaolinitic, thermic Typic Paleudults
Gorgas	Loamy, siliceous, subactive, thermic Lithic Hapludults
Iuka	Coarse-loamy, siliceous, active, acid, thermic Aquic Udifluvents
Kinston	Fine-loamy, siliceous, semiactive, acid, thermic Fluvaquentic Endoaquepts
Lucedale	Fine-loamy, siliceous, subactive, thermic Rhodic Paleudults
Luverne	Fine, mixed, semiactive, thermic Typic Hapludults
Mantachie	Fine-loamy, siliceous, active, acid, thermic Fluventic Endoaquepts
Maubila	Fine, mixed, subactive, thermic Aquic Hapludults
Minter	Fine, mixed, semiactive, thermic Typic Endoaqualfs
Minvale	Fine-loamy, siliceous, subactive, thermic Typic Paleudults
Montevallo	Loamy-skeletal, mixed, subactive, thermic, shallow Typic Dystrudepts
Myatt	Fine-loamy, siliceous, active, thermic Typic Endoaquults
Nauvoo	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Ochlockonee	Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents
Palmerdale	Loamy-skeletal, mixed, active, acid, thermic Typic Udorthents
Riverview	Fine-loamy, mixed, active, thermic Fluventic Dystrudepts
Saffell	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Savannah	Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults
Sipsey	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Smithdale	Fine-loamy, siliceous, subactive, thermic Typic Hapludults
Sunlight	Loamy-skeletal, mixed, semiactive, thermic, shallow Inceptic Hapludults
Talbott	Fine, mixed, semiactive, thermic Typic Hapludalfs
Townley	Fine, mixed, semiactive, thermic Typic Hapludults
Udorthents	Thermic Typic Udorthents
Wadley	Loamy, siliceous, subactive, thermic Grossarenic Paleudults
Wilcox	Very-fine, smectitic, thermic Chromic Dystruderts

NRCS Accessibility Statement

The Natural Resources Conservation Service (NRCS) is committed to making its information accessible to all of its customers and employees. If you are experiencing accessibility issues and need assistance, please contact our Helpdesk by phone at 1-800-457-3642 or by e-mail at ServiceDesk-FTC@ftc.usda.gov. For assistance with publications that include maps, graphs, or similar forms of information, you may also wish to contact our State or local office. You can locate the correct office and phone number at http://offices.sc.egov.usda.gov/locator/app.