



United States
Department of
Agriculture



Natural
Resources
Conservation
Service

In cooperation with
the U.S. Forest Service;
the University of Florida,
Institute of Food and
Agricultural Sciences,
Agricultural Experiment
Stations, and Soil and Water
Science Department;
and the Florida Department of
Agriculture and Consumer
Services

Soil Survey of Liberty County, Florida



How To Use This Soil Survey

General Soil Map

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

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

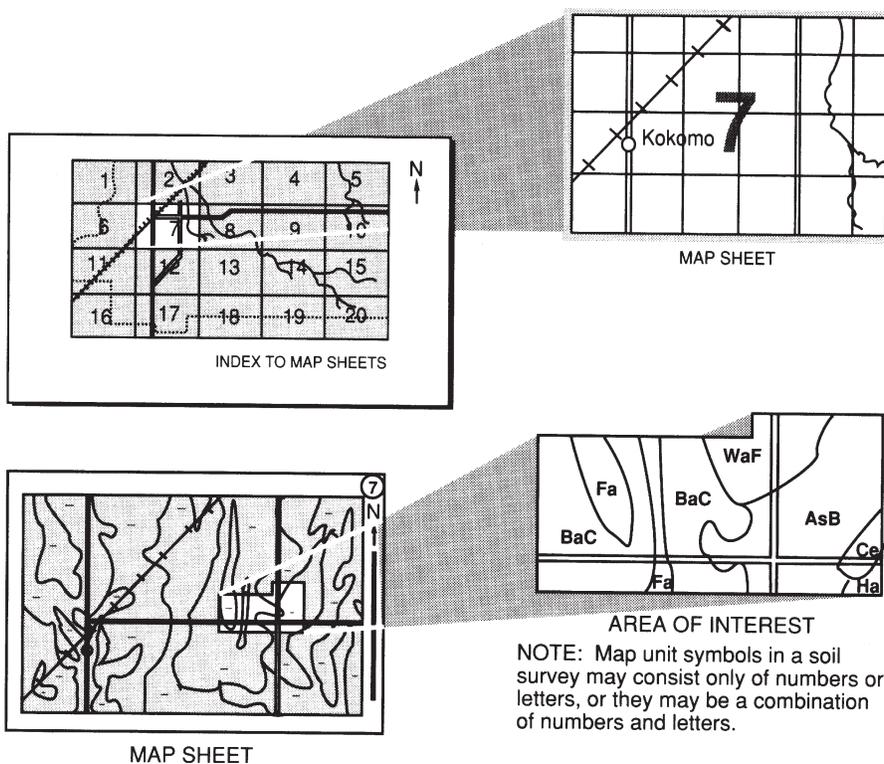
Detailed Soil Maps

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

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

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

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



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

Major fieldwork for this soil survey was completed in 2002. Soil names and descriptions were approved in 2003. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2003. This survey was made cooperatively by the Natural Resources Conservation Service; the U.S. Forest Service; the University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experiment Stations, and Soil and Water Science Department; the Florida Department of Agriculture and Consumer Services; and the Florida Department of Transportation. It is part of the technical assistance furnished to the Chipola River Soil and Water Conservation District. The U.S. Forest Service provided office space for the soil scientists.

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.

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Cover: Recently harvested timber that is ready to be processed. Forestry is the major industry in Liberty County. Forestland occupies about 96 percent of the land area of the county.

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

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Issued 2007

Foreword

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

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

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

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

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


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Soil Survey of Liberty County, Florida

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United States Department of Agriculture,
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the U.S. Forest Service;
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the Florida Department of Agriculture and Consumer Services;
the Florida Department of Transportation; and
the Chipola River Soil and Water Conservation District

LIBERTY COUNTY is in the central part of the Florida panhandle (fig. 1). The county has a total area of 539,900 acres, or about 842 square miles. It is bounded by Gadsden County on the north, the Ochlockonee River on the east, Franklin County on the south, and the Apalachicola River on the west.

Liberty County ranks 67th in population out of the 67 counties in Florida. The 2004 population of the county was 7,406 (Enterprise Florida, 2006). Bristol, the county seat, is the only incorporated city in the county. The major industry in Liberty County is forestry. Forestland occupies about 96 percent of the land area of the county.

General Nature of the County

This section provides general information about the county. It describes history and development, climate, transportation, and recreation.

History and Development

Liberty County was, for a short period of time, part of Escambia County and then was part of Jackson County (Liberty County Chamber of Commerce, 2004). Later, for 32 years, it was part of Gadsden County. On December 15, 1855, Liberty County became the 32nd county created by the Florida legislature. Liberty County was named for the objective of the people who founded and built the United States of America. Because the majority of the land is used for forestry, the population of Liberty County has remained mostly constant with little growth.

Soil Survey of Liberty County, Florida

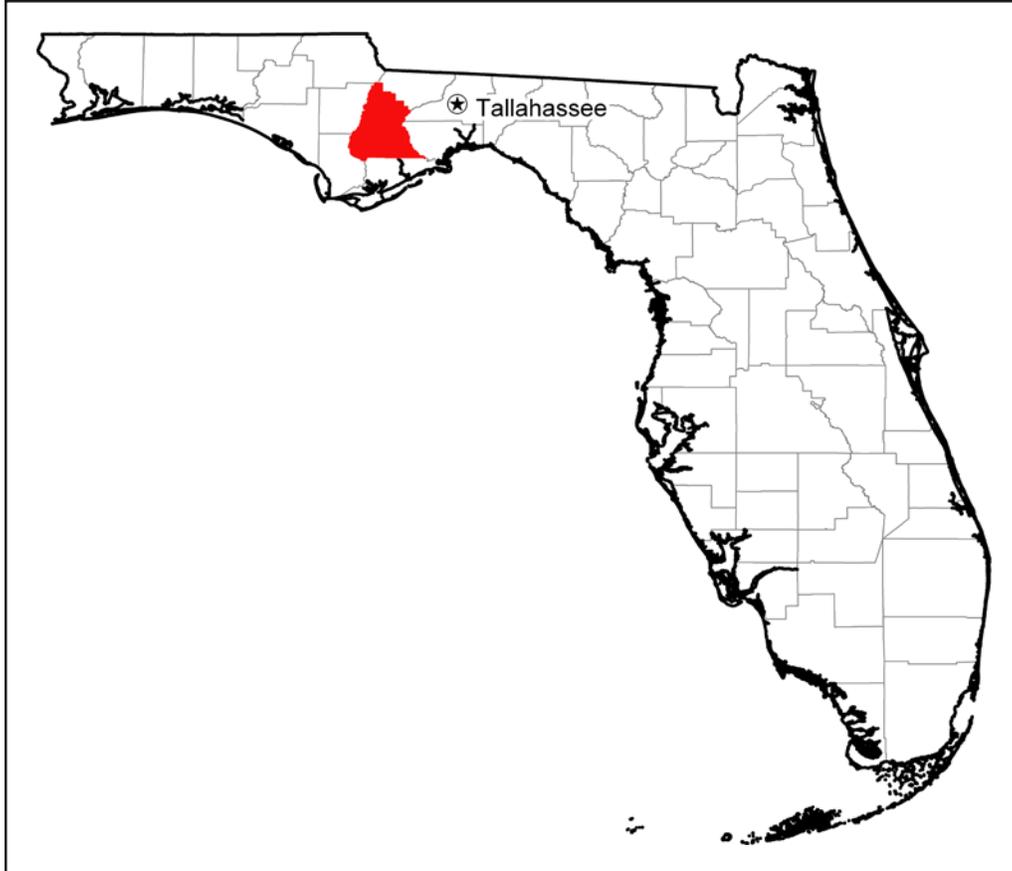


Figure 1.—Location of Liberty County in Florida.

Climate

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

The climate tables were created using data from the climate station at Quincy, Florida, in Gadsden County. There are no long-term climate stations in Liberty County. Thunderstorm days, relative humidity, percent sunshine, and wind information are estimated from the first order station at Tallahassee, Florida.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Quincy 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 52.9 degrees F and the average daily minimum temperature is 41.6 degrees. The lowest temperature on record, which occurred on February 23, 1999, was 0 degrees. In summer, the average temperature is 80.1 degrees and the average daily maximum temperature is 90.2 degrees. The highest recorded temperature, which occurred on June 19, 1998, was 102 degrees.

Growing degree days 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.

Soil Survey of Liberty County, Florida

The average annual total precipitation is about 56.66 inches. Of this, about 42.8 inches, or 75 percent, usually falls in March through November. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 1.77 inches on September 21, 1969. Thunderstorms occur on about 82 days each year and are most common between June and August.

The average seasonal snowfall is 0.1 inch. On an average, less than one day per year has at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 2.0 inches on February 10, 1973.

The average relative humidity in mid-afternoon ranges from about 45 percent in April to about 60 percent in July and August. Humidity is higher at night, and the average at dawn is about 90 percent in most months. The sun shines about 62 percent of the time possible in summer and 50 percent in winter. The prevailing wind is from the south from February to July and from the northeast in all other months. Average windspeed is highest, about 8 miles per hour, in February and March.

Transportation

The major highway system serving Liberty County is State Road 20, which is an east-west highway that connects Panama City and Tallahassee. State Roads 12 and 65 are north-south roads. State Road 12 links the City of Bristol to Interstate 10 and U.S. 90. State Road 65 links with Interstate 10 at Hosford.

The Apalachicola Northern railroad transects the county from north to south. It carries pulpwood to the paper industry in Port St. Joe, which is in Gulf County. It also delivers chemicals and other materials needed to process the pulpwood.

The Apalachicola River is also used for moving materials and products to and from the paper mill.

There is no local airport in Liberty County. The nearest landing strip is a 3,700 foot grass strip in Blountstown. It is about 4 miles west of Bristol, across the Apalachicola River.

Recreation

Liberty County has an abundance of recreational activities based upon the presence of the Ochlockonee and Apalachicola Rivers and the Apalachicola National Forest. These areas provide excellent opportunities for hunting, fishing, boating, camping, and swimming.

The Apalachicola National Forest comprises about 500,000 acres, of which about one-half is located in Liberty County. Several areas have been developed for recreational purposes and include many hiking trails. Hunting for deer, bear, turkey, and small game is a popular activity.

Torrey State Park is in the northern part of the county. The park is named for a rare species of plant, the *torreya taxifolia*. Commonly known as "stinking cedar," the plant is only found in three places: California, Japan, and Torrey State Park. The Park also includes Battery Point, where the Confederates guarded the Apalachicola River against passage by Union troops.

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. They dug many holes to study the soil profile, which is the sequence of natural layers, or

Soil Survey of Liberty County, Florida

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 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.

The descriptions, names, and delineations of the soils in this survey area do not fully agree with those of the soils in adjacent survey areas. Differences are the result of a better knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

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 two or more major soils and some minor soils or miscellaneous areas. It is named for the major soils areas. The components of one map unit can occur in another but in a different pattern.

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

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

1. *Lakeland-Foxworth*

Dominantly nearly level to very steep, moderately well drained to excessively drained soils that are sandy throughout and that have lamellae deep in some profiles; on hills, ridges, and hillslopes that are highly dissected in some places

Setting

Location in the survey area: Northern and western parts

Landscape: Coastal Plain

Landform position: Lakeland—broad ridges and hillslopes; Foxworth—low hills and hillslopes

Slope: 0 to 85 percent

Composition

Percent of the survey area: 13

Lakeland soils: 50 percent

Foxworth soils: 35 percent

Minor soils: 15 percent, including Alpin, Chipley, Rutlege, and Troup soils

Soil Characteristics

Lakeland

Surface layer: Brown sand

Subsoil: Upper part—brownish yellow sand; lower part—yellow sand

Drainage class: Excessively drained

Seasonal high water table: Below a depth of 72 inches

Slope: 0 to 85 percent

Foxworth

Surface layer: Brown sand

Subsoil: Upper part—brownish yellow sand; next part—very pale brown sand that has yellowish brown mottles in the lower portion; lower part—light gray sand that has yellowish brown mottles

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Drainage class: Moderately well drained

Seasonal high water table: Apparent, at a depth of 42 to 72 inches from January through March and from July through September

Slope: 0 to 25 percent

Minor soils

- Alpin soils, which are in positions similar to those of the major soils and have loamy sand layers about 5 millimeters thick below a depth of 40 inches
- Chipley soils, which are in the lower positions and are somewhat poorly drained
- Rutlege soils, which are in stream bottoms and are poorly drained or very poorly drained
- Troup soils, which are in positions similar to those of the major soils and have a loamy layer at a depth of 40 to 80 inches

Land Use

Major uses: Forestland and cultivated crops

2. Lucy-Troup

Dominantly nearly level to very steep, somewhat excessively drained and well drained soils that have a sandy surface layer and a loamy subsoil; on hills, ridges, and hillslopes that are highly dissected in some places

Setting

Location in the survey area: Extreme northern part

Landscape: Coastal Plain

Landform position: Broad ridges and hills and hillslopes

Slope: 0 to 45 percent

Composition

Percent of the survey area: 1.8

Lucy soils: 45 percent

Troup soils: 40 percent

Minor soils: 15 percent, including Blanton, Brantley, and Okeelala soils

Soil Characteristics

Lucy

Surface layer: Dark grayish brown sand

Subsurface layer: Strong brown sand

Subsoil: Yellowish red sandy loam

Drainage class: Well drained

Seasonal high water table: Below a depth of 72 inches

Slope: 0 to 45 percent

Troup

Surface layer: Dark grayish brown sand

Subsurface: Upper part—yellowish brown sand; lower part—strong brown loamy sand

Subsoil: Yellowish red sandy loam

Drainage class: Somewhat excessively drained

Seasonal high water table: Below a depth of 72 inches

Slope: 5 to 8 percent

Minor soils

- Blanton soils, which are in the lower positions and are moderately well drained
- Brantley and Okeelala soils, which are in positions similar to those of the major soils and have a loamy or clayey layer within a depth of 20 inches

Land Use

Major uses: Forestland and cultivated crops

3. Goldsboro-Dothan-Fuquay

Dominantly nearly level to strongly sloping, moderately well drained and well drained soils that have a loamy surface layer and a loamy subsoil; on ridges, hills, knolls, rises, and hillslopes that are dissected in some places

Setting

Location in the survey area: Western part, adjacent to the Apalachicola river

Landscape: Coastal Plain

Landform position: Dothan and Fuquay—broad hills and ridges and hillslopes;
Goldsboro—knolls and rises

Slope: 0 to 12 percent

Composition

Percent of the survey area: 4.1

Goldsboro soils: 45 percent

Dothan soils: 20 percent

Fuquay soils: 20 percent

Minor soils: 15 percent, including Albany, Blanton, and Stilson soils

Soil Characteristics

Goldsboro

Surface layer: Brown loamy sand

Subsurface layer: Light yellowish brown loamy fine sand

Subsoil: Upper part—yellowish brown sandy loam that has yellowish red, strong brown, and light brownish gray mottles in the lower portion; next part—light olive brown sandy clay loam that has yellowish red, strong brown, and light yellowish brown mottles; lower part—light gray sandy loam that has yellowish brown and light olive brown mottles

Drainage class: Moderately well drained

Seasonal high water table: Perched, at a depth of 18 to 36 inches from January through March and from July through September

Slope: 0 to 5 percent

Dothan

Surface layer: Brown loamy sand

Subsurface layer: Yellowish brown loamy fine sand

Subsoil: Upper part—strong brown sandy clay loam; lower part—mottled light yellowish brown, yellowish brown, and light brownish gray clay loam that has about 5 percent, by volume, nodular plinthite

Drainage class: Well drained

Seasonal high water table: Perched, at a depth of 42 to 60 inches from January through March and from July through September

Slope: 0 to 12 percent

Fuquay

Surface layer: Dark grayish brown loamy sand

Subsurface layer: Brown sand

Subsoil: Upper part—reddish yellow sandy loam; next part—mottled brownish yellow and yellowish brown sandy clay loam that has about 7 percent, by volume, nodular plinthite; lower part—mixed brownish yellow and yellowish brown sandy clay loam that has about 15 percent, by volume, nodular plinthite

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Drainage class: Well drained

Seasonal high water table: Perched, at a depth of 48 to 60 inches from January through March and from July through September

Slope: 0 to 12 percent

Minor soils

- Albany soils, which are in the lower positions and are somewhat poorly drained
- Blanton and Stilson soils, which are in the slightly lower positions, are moderately well drained, and have a loamy layer below a depth of 40 inches

Land Use

Major uses: Forestland and cultivated crops

4. Albany-Blanton-Stilson

Dominantly somewhat poorly drained and moderately well drained soils that have a sandy surface layer and a loamy subsoil; on hillslopes, knolls, ridges, and rises

Setting

Location in the survey area: Scattered throughout, typically adjacent to streams

Landscape: Coastal Plain

Landform position: Blanton and Stilson—broad ridges, marine terraces, and hillslopes; Albany—knolls and rises

Slope: 0 to 8 percent

Composition

Percent of the survey area: 2.2

Albany soils: 50 percent

Blanton soils: 20 percent

Stilson soils: 15 percent

Minor soils: 15 percent, including Dothan, Fuquay, and Goldsboro soils

Soil Characteristics

Albany

Surface layer: Dark grayish brown sand

Subsurface layer: Upper part—pale brown sand; next part—light yellowish brown sand that has reddish yellow mottles; lower part—light gray sand that has reddish yellow, yellowish brown, and brownish yellow mottles

Subsoil: Light gray fine sandy loam that has brownish yellow, reddish yellow, and red mottles

Drainage class: Somewhat poorly drained

Seasonal high water table: Apparent, at a depth of 12 to 42 inches from January through March and from July through September

Slope: 0 to 5 percent

Blanton

Surface layer: Light brownish gray sand

Subsurface layer: Upper part—light yellowish brown sand; lower part—very pale brown sand

Subsoil: Upper part—brownish yellow fine loamy sand that has pockets of white sand; lower part—pale brown fine sandy loam that has pockets of white sand and a few strong brown nodules of plinthite

Drainage class: Moderately well drained

Seasonal high water table: Apparent, at a depth of 42 to 66 inches from January through March and from July through September

Slope: 0 to 8 percent

Stilson

Surface layer: Dark grayish brown fine sand

Subsurface layer: Light brownish gray sand

Subsoil: Upper part—yellowish brown sandy loam that has a few ironstone nodules; next part—brownish yellow sandy clay that has light gray mottles; next part—brownish yellow sandy clay loam that has about 10 percent, by volume, plinthite nodules and light brownish gray and light gray mottles; lower part—olive yellow sandy clay loam that has about 12 percent, by volume, plinthite nodules and light gray and light brownish gray mottles

Drainage class: Moderately well drained

Seasonal high water table: Perched, at a depth of 30 to 36 inches from January through March and from July through September

Slope: 0 to 3 percent

Minor soils

- Dothan and Fuquay soils, which are in the higher positions and are well drained
- Goldsboro soils, which are in positions similar to those of the major soils and have a loamy layer within a depth of 20 inches

Land Use

Major uses: Forestland and cultivated crops

5. Hurricane-Chipley-Centenary

Dominantly nearly level to gently sloping, somewhat poorly drained and moderately well drained soils that have a sandy surface layer and a sandy subsoil and that have a spodic layer (hardpan) in some places; on knolls and rises

Setting

Location in the survey area: Scattered throughout the northern part

Landscape: Coastal Plain

Landform position: Knolls and low rises that are slightly higher than the adjacent flatwoods

Slope: 0 to 5 percent

Composition

Percent of the survey area: 1.3

Hurricane soils: 40 percent

Chipley soils: 35 percent

Centenary soils: 15 percent

Minor soils: 10 percent, including Foxworth, Leon, and Pottsburg soils

Soil Characteristics

Hurricane

Surface layer: Dark grayish brown sand

Subsurface layer: Upper part—light yellowish brown sand; next part—light gray sand that has yellowish red mottles; next part—light gray sand that has reddish yellow and yellowish red mottles; lower part—pinkish gray sand that has yellowish red mottles

Subsoil: Dark reddish brown sand that has a few black nodules

Drainage class: Somewhat poorly drained

Seasonal high water table: Apparent, at a depth of 18 to 42 inches from January through March and from July through September

Slope: 0 to 3 percent

Chipley

Surface layer: Dark brown sand

Substratum: Upper part—brown sand; next part—light gray sand that has brown mottles; next part—light gray sand that has yellowish red and strong brown mottles; lower part—white sand that has reddish yellow mottles

Drainage class: Somewhat poorly drained

Seasonal high water table: Apparent, at a depth of 18 to 42 inches from January through March and from July through September

Slope: 0 to 5 percent

Centenary

Surface layer: Very dark grayish brown sand

Subsurface layer: Upper part—brownish yellow sand; next part—very pale brown sand; lower part—light gray sand that has strong brown mottles

Subsoil: Dark reddish gray sand that has pockets of pinkish gray sand

Drainage class: Moderately well drained

Seasonal high water table: Apparent, at a depth of 42 to 60 inches from January through March and from July through September

Slope: 0 to 5 percent

Minor soils

- Foxworth soils, which are in positions similar to those of the major soils and are moderately well drained but do not have spodic material in the lower part of the subsoil
- Leon and Pottsburg soils, which are in the lower positions and are poorly drained

Land Use

Major uses: Forestland and cultivated crops

6. Pottsburg-Leon-Lynn Haven

Dominantly nearly level, poorly drained soils that have a sandy surface layer, a sandy subsoil, and a spodic layer (hardpan); in areas of flatwoods and flats

Setting

Location in the survey area: Scattered throughout

Landscape: Coastal Plain

Landform position: Leon and Pottsburg—palmetto flatwoods; Lynn Haven—palmetto flatwoods and flats

Slope: 0 to 2 percent

Composition

Percent of the survey area: 27.8

Pottsburg soils: 50 percent

Leon soils: 20 percent

Lynn Haven soils: 15 percent

Minor soils: 15 percent, including Chipley, Hurricane, and Rutlege soils

Soil Characteristics

Pottsburg

Surface layer: Upper part—very dark gray sand; lower part—dark grayish brown fine sand

Subsurface layer: Upper part—light brownish gray fine sand; next part—pale yellow fine sand that has strong brown mottles; lower part—brown fine sand that has brownish yellow mottles

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Subsoil: Upper part—brown fine sand that has black nodules; lower part—black fine sand

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Slope: 0 to 2 percent

Leon

Surface layer: Dark brown sand

Subsurface layer: White sand

Subsoil: Dark reddish brown sand

Substratum: Upper part—brown sand; lower part—white sand

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Slope: 0 to 2 percent

Lynn Haven

Surface layer: Upper part—black sand; lower part—very dark gray fine sand

Subsurface layer: Light gray fine sand

Subsoil: Very dark gray fine sand

Substratum: Upper part—light brownish gray fine sand; lower part—light olive brown fine sand

Drainage class: Poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Chipley and Hurricane soils, which are in the slightly higher positions and are somewhat poorly drained
- Rutlege soils, which are in the lower positions and are very poorly drained

Land Use

Major uses: Forestland and wildlife habitat

7. Woodington-Bladen-Lynchburg

Dominantly nearly level, poorly drained and somewhat poorly drained soils that have a loamy surface layer and a loamy or clayey subsoil; on flats and knolls (fig. 2)

Setting

Location in the survey area: Dominantly in the southwestern part

Landscape: Coastal Plain

Landform position: Bladen and Woodington—flats; Lynchburg—elevated knolls

Slope: 0 to 2 percent

Composition

Percent of the survey area: 9.5

Woodington soils: 35 percent

Bladen soils: 30 percent

Lynchburg soils: 25 percent

Minor soils: 10 percent, including Leefield, Pelham, and Rains soils

Soil Characteristics

Woodington

Surface layer: Dark gray loamy sand



Figure 2.—A savannah in an area of general soil map unit 7, Woodington-Bladen-Lynchburg.
(Photo courtesy of the U.S. Forest Service.)

Subsurface layer: Gray fine sandy loam that has yellowish brown mottles

Subsoil: Upper part—gray fine sandy loam that has strong brown mottles; lower part—gray fine sandy clay that has yellowish brown, strong brown, and yellow mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through March and from July through September

Slope: 0 to 2 percent

Bladen

Surface layer: Black fine sandy loam

Subsurface layer: Grayish brown fine sandy loam

Subsoil: Upper part—dark gray clay that has yellowish brown mottles; lower part—gray clay that has yellowish brown mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through March and from July through September

Slope: 0 to 2 percent

Lynchburg

Surface layer: Very dark gray loamy sand

Subsurface layer: Upper part—dark grayish brown fine sandy loam that has brown mottles; lower part—light olive brown fine sandy loam that has yellowish brown, yellowish red, and grayish brown mottles

Subsoil: Upper part—light olive brown sandy clay loam that has yellowish brown, yellowish red, and grayish brown mottles; lower part—grayish brown sandy

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clay loam that has yellowish brown, yellowish red, strong brown, and brown mottles

Substratum: Upper part—dark gray clay loam that has yellowish brown and yellowish red mottles; lower part—gray clay that has strong brown and reddish brown mottles

Drainage class: Somewhat poorly drained

Seasonal high water table: Apparent, at a depth of 18 to 30 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Leefield, Pelham, and Rains soils, which are in positions similar to those of the major soils but differ in the amount clay in the subsoil and substratum

Land Use

Major uses: Forestland and wildlife habitat

8. Plummer-Surrency-Pelham

Dominantly nearly level, very poorly drained and poorly drained soils that have a loamy or sandy surface layer and a loamy subsoil; in areas of palmetto flatwoods, flats, and depressions

Setting

Location in the survey area: Southern part, mostly in the Apalachicola National Forest

Landscape: Coastal Plain

Landform position: Plummer and Pelham—flats and flatwoods; Surrency—depressions

Slope: 0 to 5 percent

Composition

Percent of the survey area: 0.2

Plummer soils: 50 percent

Surrency soils: 25 percent

Pelham soils: 15 percent

Minor soils: 10 percent, including Osier, Rains, and Rutlege soils

Soil Characteristics

Plummer

Surface layer: Black sand

Subsurface layer: Upper part—gray sand; lower part—gray loamy sand

Subsoil: Upper part—light gray sandy loam that has yellowish brown mottles; lower part—light gray sandy clay loam

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Slope: 0 to 5 percent

Surrency

Surface layer: Black loamy sand

Subsurface layer: Gray sand

Subsoil: Upper part—grayish brown sandy clay loam that has brownish yellow mottles; lower part—light gray sandy loam that has yellowish brown mottles

Drainage class: Very poorly drained

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Seasonal high water table: Apparent, at the surface to 6 inches above the surface from January through September

Slope: 0 to 1 percent

Pelham

Surface layer: Very dark brown loamy sand

Subsurface layer: Upper part—grayish brown loamy fine sand; next part—light brownish gray loamy fine sand that has brown mottles; lower part—light gray loamy fine sand that has yellowish brown mottles

Subsoil: Upper part—light gray sandy loam that has brownish yellow mottles; lower part—light brownish gray sandy clay loam that has yellowish brown and yellowish red mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Osier and Rutlege soils, which are in positions similar to those of the major soils but do not have loamy material in the subsoil
- Rains soils, which are in positions similar to those of the major soils but have a loamy subsoil within a depth of 20 inches

Land Use

Major uses: Forestland and wildlife habitat

9. Rutlege-Pantego-Pickney

Dominantly nearly level, very poorly soils that have a loamy or sandy surface layer and a sandy or loamy subsoil; on flood plains and in depressions (fig. 3)

Setting

Location in the survey area: Throughout

Landscape: Coastal Plain

Landform position: Stream bottoms and depressional areas

Slope: 0 to 2 percent

Composition

Percent of the survey area: 15.2

Rutlege soils: 50 percent

Pantego soils: 25 percent

Pickney soils: 15 percent

Minor soils: 10 percent, including Bibb, Dorovan, and Pamlico soils

Soil Characteristics

Rutlege

Surface layer: Black fine sand

Substratum: Upper part—dark gray fine sand; next part—gray fine sand; lower part—light gray fine sand

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to 6 inches above the surface from January through September

Slope: 0 to 2 percent



Figure 3.—A cypress dome in an area of general soil map unit 9, Rutlege-Pantego-Pickney.
(Photo courtesy of the U.S. Forest Service.)

Pantego

Surface layer: Very dark gray fine sandy loam

Subsoil: Upper part—dark gray sandy clay loam that has yellowish brown mottles;
next part—light brownish gray sandy clay loam that has brownish yellow mottles;
lower part—light gray sandy loam that has brownish yellow and yellow mottles

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to 12 inches above the surface
from January through September

Slope: 0 to 2 percent

Pickney

Surface layer: Upper part—black mucky fine sand; lower part—black fine sand

Substratum: Upper part—dark grayish brown fine sand; lower part—grayish brown to
gray fine sand

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to 12 inches above the surface
from January through September

Slope: 0 to 2 percent

Minor soils

- Bibb soils, which are in the slightly higher positions and are poorly drained
- Dorovan and Pamlico soils, which are in positions similar to those of the major soils but are organic soils

Land Use

Major uses: Wildlife habitat

10. Scranton-Meadowbrook

Dominantly nearly level, poorly drained soils that have a loamy or sandy surface layer and a loamy or sandy subsoil; in areas of undefined drainageways, sloughs, and flats

Setting

Location in the survey area: Eastern part, mostly adjacent to the Ochlockonee river

Landscape: Coastal Plain

Landform position: Undefined drainageways, sloughs, and low flats

Slope: 0 to 2 percent

Composition

Percent of the survey area: 4.4

Scranton soils: 45 percent

Meadowbrook soils: 40 percent

Minor soils: 15 percent, including Lynn Haven, Osier, and Rutlege soils

Soil Characteristics

Scranton

Surface layer: Black loamy sand

Subsurface layer: Dark gray fine sand that has olive brown mottles

Substratum: Upper part—dark grayish brown fine sand that has light olive brown mottles; next part—grayish brown fine sand that has light olive brown and dark yellowish brown mottles; next part—mottled brownish yellow, dark grayish brown, yellowish brown, and dark yellowish brown fine sand; lower part—mottled dark grayish brown, brown, grayish brown, and very dark brown fine sand

Drainage class: Poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Slope: 0 to 2 percent

Meadowbrook

Surface layer: Black sand

Subsurface layer: Light brownish gray sand that has brownish yellow mottles

Subsoil: Upper part—brown sand; lower part—light brownish gray sandy loam that has yellowish brown and reddish yellow mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Lynn Haven and Osier soils, which are in the slightly higher positions on the edges of sloughs
- Rutlege soils, which are in the lower position and are very poorly drained

Land Use

Major uses: Wildlife habitat

11. Brickyard-Wahee-Ochlockonee

Dominantly nearly level, very poorly drained, somewhat poorly drained, and moderately well drained soils that have a loamy surface layer and a loamy or clayey subsoil; on flood plains

Setting

Location in the survey area: Western side, along the Apalachicola river

Landscape: Coastal Plain

Landform position: Brickyard—low areas on the flood plain; Wahee—low stream terraces on the flood plain; Ochlockonee—high stream terraces on the flood plain

Slope: 0 to 2 percent

Composition

Percent of the survey area: 9.3

Brickyard soils: 40 percent

Wahee soils: 20 percent

Ochlockonee soils: 20 percent

Minor soils: 20 percent, including Bibb, Chowan, and Garcon soils

Soil Characteristics

Brickyard

Surface layer: Brown clay loam

Substratum: Upper part—grayish brown clay; next part—light gray clay; lower part—bluish gray clay

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through September

Slope: 0 to 2 percent

Wahee

Surface layer: Light olive brown sandy loam

Subsurface: Brown fine sandy loam

Subsoil: Upper part—yellowish brown sandy clay that has light brownish gray mottles; next part—gray clay that has yellowish brown mottles; lower part—gray sandy clay that has yellowish brown mottles

Drainage class: Somewhat poorly drained

Seasonal high water table: Apparent, at a depth of 18 to 30 inches from January through March and from July through September

Slope: 0 to 2 percent

Ochlockonee

Surface layer: Dark yellowish brown loamy sand

Substratum: Upper part—mottled strong brown and yellowish brown loamy fine sand; next part—mottled very pale brown and light yellowish brown loamy fine sand; lower part—yellowish brown sandy loam and loamy sand having strong brown and light gray mottles

Drainage class: Well drained

Seasonal high water table: Apparent, at a depth of 36 to 60 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Bibb soils, which are poorly drained
- Chowan soils, which are poorly drained and have organic material in the subsoil
- Garcon soils, which are in the lower positions and are somewhat poorly drained

Land Use

Major uses: Wildlife habitat

12. Bibb-Ellore

Dominantly nearly level, very poorly drained and poorly drained soils that have a loamy, sandy, or mucky surface layer and a sandy or loamy subsoil; on flood plains

Setting

Location in the survey area: Eastern side, along the Ochlockonee River (fig. 4)

Landscape: Coastal Plain

Landform position: Bibb—low stream terraces on the flood plain; Ellore—low areas on the flood plain

Slope: 0 to 2 percent

Composition

Percent of the survey area: 2.4

Bibb soils: 55 percent

Ellore soils: 20 percent

Minor soils: 25 percent, including Dorovan, Meggett, and Pamlico soils

Soil Characteristics

Bibb

Surface layer: Upper part—very dark gray fine sandy loam; lower part—dark grayish brown fine sandy loam

Substratum: Upper part—gray sandy loam; next part—gray sandy loam that has reddish yellow mottles; lower part—gray loamy sand that has yellowish brown mottles



Figure 4.—The Ochlockonee River in an area of general soil map unit 12, Bibb-Ellore.

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Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Slope: 0 to 2 percent

Elloree

Surface layer: Very dark gray loamy sand

Subsurface: Light brownish gray sand

Subsoil: Upper part—light gray sandy loam that has yellowish brown mottles; lower part—gray to light gray sandy loam to loamy sand having yellowish brown and reddish yellow mottles

Substratum: Gray sand that has yellowish brown mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Slope: 0 to 2 percent

Minor soils

- Dorovan and Pamlico soils, which are in the lower areas and are organic soils
- Meggett soils, which are in positions similar to those of the major soils but have a clayey layer in the subsoil

Land Use

Major uses: Wildlife habitat

13. Bibb-Rutlege-Pickney

Dominantly nearly level, very poorly drained and poorly drained soils that have a sandy or mucky sand surface layer and a sandy or loamy subsoil; on flood plains

Setting

Location in the survey area: Mainly in the north-central part, along Telogia Creek

Landscape: Coastal Plain

Landform position: Bibb—low stream terraces on the flood plain; Pickney and Rutlege—low areas on the flood plain

Slope: 0 to 2 percent

Composition

Percent of the survey area: 8.8

Bibb soils: 45 percent

Rutlege soils: 35 percent

Pickney soils: 10 percent

Minor soils: 10 percent, including Elloree, Pamlico, and Wahee soils

Soil Characteristics

Bibb

Surface layer: Upper part—very dark gray fine sandy loam; lower part—dark grayish brown fine sandy loam

Substratum: Upper part—gray sandy loam; next part—gray sandy loam that has reddish yellow mottles; lower part—gray loamy sand that has yellowish brown mottles

Drainage class: Poorly drained

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Slope: 0 to 2 percent

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Rutlege

Surface layer: Black fine sand

Substratum: Upper part—dark gray fine sand; next part—gray fine sand; lower part—light gray fine sand

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to 6 inches above the surface from January through September

Slope: 0 to 2 percent

Pickney

Surface layer: Upper part—black mucky fine sand; lower part—black fine sand

Substratum: Upper part—dark grayish brown fine sand; lower part—grayish brown to gray fine sand

Drainage class: Very poorly drained

Seasonal high water table: Apparent, at the surface to 12 inches above the surface from January through December

Slope: 0 to 2 percent

Minor soils

- Ellore soils, which are in position similar to those of the Bibb soil but are not stratified
- Pamlico soils, which are in position similar to those of the Pickney and Rutlege soils but are organic
- Wahee soils, which are in the higher positions and are somewhat poorly drained

Land Use

Major uses: Wildlife habitat

Detailed Soil Map Units

The map units delineated on the detailed maps 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. More information about each map unit is given under the heading "Use and Management of the Soils."

A map unit delineation on a map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils or miscellaneous areas. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils and miscellaneous areas 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 "included" areas that belong to other taxonomic classes.

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

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

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit.

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

Soils of one series can differ in texture of the surface layer, slope, stoniness,

salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Troup sand, 0 to 5 percent slopes, is a phase of the Troup 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. Goldhead-Meadowbrook complex, depressional, 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. Plummer, Sapelo, and Pottsburg soils is an undifferentiated group in this survey area.

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

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

2—Albany sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 10 to 100 acres

Composition

Albany and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 6 inches—dark grayish brown sand

Subsurface layer:

6 to 22 inches—pale brown sand

22 to 31 inches—light yellowish brown loamy sand that has reddish yellow and light gray mottles

31 to 47 inches—light gray sand that has reddish yellow, yellowish brown, and brownish yellow mottles

Subsoil:

47 to 80 inches—light gray fine sandy loam that has brownish yellow, reddish yellow, and yellowish brown mottles

Soil Properties and Qualities

Drainage class: Somewhat poorly drained

Permeability: Moderate or moderately slow

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Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 12 to 42 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Poorly drained Plummer soils in the slightly lower positions

Similar soils:

- Small areas that have more than 5 percent plinthite in the subsoil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 3e

Ecological community: Mixed Hardwood and Pine

4—Alpin-Foxworth complex, 5 to 12 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 10 to 150 acres

Composition

Alpin and similar soils: 45 percent

Foxworth and similar soils: 40 percent

Dissimilar soils: 15 percent

Typical Profile

Alpin

Surface layer:

0 to 10 inches—brown sand

Subsurface layer:

10 to 25 inches—brownish yellow sand

25 to 45 inches—yellow sand

Subsoil:

45 to 80 inches—light gray sand that has strong brown loamy sand layers about 5 millimeters thick

Foxworth

Surface layer:

0 to 9 inches—brown sand

Substratum:

9 to 37 inches—brownish yellow sand

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37 to 54 inches—very pale brown sand

54 to 71 inches—very pale brown sand that has yellowish brown mottles

71 to 80 inches—light gray sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Alpin—excessively drained; Foxworth—moderately well drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Alpin—at a depth of greater than 72 inches; Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Centenary and Chipley soils in the slightly lower positions

Similar soils:

- Excessively drained Lakeland soils, which do not have lamellae
- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: Alpin—6s; Foxworth—4s

Ecological community: Longleaf Pine-Turkey Oak Hills

5—Rains and Bladen soils

Setting

Landscape: Coastal Plain

Landform: Marine terraces and flats

Shape of areas: Irregular

Size of areas: 15 to 85 acres

Composition

Rains and similar soils: 50 percent

Bladen and similar soils: 45 percent

Dissimilar soils: 5 percent

Typical Profile

Rains

Surface layer:

0 to 4 inches—dark grayish brown sandy loam

Subsurface layer:

4 to 13 inches—grayish brown sandy loam that has brown mottles

Subsoil:

13 to 35 inches—light brownish gray sandy clay loam that has yellowish brown mottles

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35 to 65 inches—light gray sandy clay loam that has yellowish brown and dark yellowish brown mottles

65 to 80 inches—light gray sandy clay that has yellowish brown mottles

Bladen

Surface layer:

0 to 5 inches—black fine sandy loam

Subsurface layer:

5 to 14 inches—grayish brown fine sandy loam

Subsoil:

14 to 40 inches—dark gray clay that has yellowish brown mottles

40 to 80 inches—gray clay that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Rains—moderate; Bladen—slow

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield and Lynchburg soils in the slightly higher positions

Similar soils:

- Poorly drained Woodington soils, which have a loamy subsoil

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland (fig. 5)

Interpretive Groups

Land capability classification: Rains—3w; Bladen—6w

Ecological community: Slough

6—Blanton sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and hills

Shape of areas: Irregular

Size of areas: 20 to 150 acres

Composition

Blanton and similar soils: 85 percent

Dissimilar soils: 15 percent



Figure 5.—Slash pine in an area of map unit 5, Rains and Bladen soils. The area was recently burned to remove a dense understory. (Photo courtesy of the U.S. Forest Service.)

Typical Profile

Surface layer:

0 to 8 inches—light brownish gray sand

Subsurface layer:

8 to 43 inches—light yellowish brown sand

43 to 59 inches—very pale brown sand

Subsoil:

59 to 73 inches—brownish yellow fine loamy sand that has pockets of white mottles

73 to 80 inches—pale brown fine sandy loam that has pockets of white mottles and a few strong brown plinthite nodules

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderate or moderately slow

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 42 to 66 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Somewhat poorly drained Albany soils in the slightly lower positions

Similar soils:

- Moderately well drained Goldsboro soils, which have a loamy layer within a depth of 20 inches
- Moderately well drained Stilson soils, which contain 5 to 32 percent, by volume, plinthite in the loamy subsoil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 3s

Ecological community: Mixed Hardwood and Pine

7—Blanton sand, 5 to 8 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hills and hillslopes

Shape of areas: Irregular

Size of areas: 15 to 60 acres

Composition

Blanton and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:

0 to 8 inches—light brownish gray sand

Subsurface layer:

8 to 43 inches—light yellowish brown sand

43 to 59 inches—very pale brown sand

Subsoil:

59 to 73 inches—brownish yellow fine sandy loam that has pockets of white mottles

73 to 80 inches—pale brown fine sandy loam that has pockets of white mottles and a few strong brown plinthite nodules

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 42 to 66 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Somewhat poorly drained Albany soils in the lower positions

Similar soils:

- Moderately well drained Goldsboro soils, which have a loamy layer within a depth of 20 inches
- Moderately well drained Stilson soils, which contain 5 to 32 percent, by volume, plinthite in the loamy subsoil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 4s

Ecological community: Mixed Hardwood and Pine

8—Brickyard clay loam, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 250 acres

Composition

Brickyard and similar soils: 75 percent

Dissimilar soils: 25 percent

Typical Profile

Surface layer:

0 to 4 inches—brown clay loam

Substratum:

4 to 8 inches—grayish brown clay

8 to 50 inches—light gray clay

50 to 80 inches—bluish gray clay

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Very slow

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through September

Flooding: Frequent

Shrink-swell potential: Moderate to high

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration

Minor Components

Dissimilar soils:

- Chowan, Garcon, Ochlockonee, Ousley, and Wahee soils, which are better drained than the Brickyard soil, in the higher positions

Similar soils:

- Soils that do not have clayey material within a depth of 20 inches

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 7w

Ecological community: Bottomland Hardwoods

9—Centenary sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Rises and knolls

Shape of areas: Irregular

Size of areas: 20 to 120 acres

Composition

Centenary and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 5 inches—very dark grayish brown sand

Subsurface layer:

5 to 16 inches—brownish yellow sand

16 to 53 inches—very pale brown sand

53 to 68 inches—light gray sand that has strong brown mottles

Subsoil:

68 to 80 inches—dark reddish gray sand that has pockets of pinkish gray sand

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderately rapid

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 42 to 60 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Excessively drained Alpin and Lakeland soils in the slightly higher positions
- Well drained Troup soils in the slightly higher positions
- Somewhat poorly drained Chipley soils in the lower positions

Similar soils:

- Moderately well drained Foxworth soils, which do not have a hardpan layer (Bh horizon) below a depth of 50 inches

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 3s
Ecological community: Longleaf Pine-Turkey Oak Hills

11—Chipley-Foxworth complex, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain
Landform: Knolls and rises
Shape of areas: Irregular
Size of areas: 10 to 75 acres

Composition

Chipley and similar soils: 50 percent
Foxworth and similar soils: 40 percent
Dissimilar soils: 10 percent

Typical Profile

Chipley

Surface layer:
0 to 6 inches—dark brown sand

Substratum:
6 to 19 inches—light yellowish brown sand
19 to 31 inches—light gray sand that has strong brown mottles
31 to 39 inches—light gray sand that has yellowish red and brownish yellow mottles
39 to 80 inches—white sand that has reddish yellow mottles

Foxworth

Surface layer:
0 to 9 inches—brown sand

Substratum:
9 to 37 inches—brownish yellow sand
37 to 54 inches—very pale brown sand
54 to 71 inches—very pale brown sand that has yellowish brown mottles
71 to 80 inches—light gray sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Chipley—somewhat poorly drained; Foxworth—moderately well drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Chipley—apparent, at a depth of 18 to 42 inches from January through March and from July through September; Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Excessively drained Lakeland soils in the higher positions
- Poorly drained Leon soils in the lower positions

Similar soils:

- Centenary and Hurricane soils, which have a hardpan layer (Bh horizon)

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 3s

Ecological community: Longleaf Pine-Turkey Oak Hills

12—Rutlege and Plummer soils, depressional

Setting

Landscape: Coastal Plain

Landform: Depressions

Shape of areas: Irregular

Size of areas: 5 to 70 acres

Composition

Rutlege and similar soils: 45 percent

Plummer and similar soils: 40 percent

Dissimilar soils: 15 percent

Typical Profile

Rutlege

Surface layer:

0 to 12 inches—black fine sand

Substratum:

12 to 30 inches—dark gray fine sand

30 to 60 inches—gray fine sand

60 to 80 inches—light gray fine sand

Plummer

Surface layer:

0 to 10 inches—black sand

Subsurface layer:

10 to 46 inches—gray sand

46 to 55 inches—gray loamy sand

Subsoil:

55 to 64 inches—light gray sandy loam that has yellowish brown mottles

64 to 80 inches—light gray sandy clay loam

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Rutlege—rapid; Plummer—moderate

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Available water capacity: Low

Seasonal high water table: Apparent, at the surface to 2 feet above the surface from
January through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Poorly drained Bibb soils on the edges of the depressions

Similar soils:

- Soils that are similar to the major soils but have several inches of muck on the surface

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 7w

Ecological community: Swamp Hardwoods

13—Dorovan-Pamlico complex, depressional

Setting

Landscape: Coastal Plain

Landform: Depressions and flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 90 acres

Composition

Dorovan and similar soils: 50 percent

Pamlico and similar soils: 45 percent

Dissimilar soils: 5 percent

Typical Profile

Dorovan

Surface layer:

0 to 53 inches—black muck

Subsurface layer:

53 to 80 inches—black muck

Pamlico

Surface layer:

0 to 45 inches—black muck

Substratum:

45 to 80 inches—gray sand that has dark brown lenses of loamy sand

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Rapid

Soil Survey of Liberty County, Florida

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to 12 inches above the surface from January through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: High

Natural fertility: Medium

Other distinctive properties: Low strength

Minor Components

Dissimilar soils:

- Poorly drained Lynn Haven soils, which are mineral soils

Similar soils:

- Soils that are similar to the major soils but only have 10 to 15 inches of muck in the surface layer

Land Use

Dominant uses: Wildlife habitat

Other uses: None

Interpretive Groups

Land capability classification: 7w

Ecological community: Swamp Hardwoods

14—Dothan loamy sand, 0 to 2 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and hills

Shape of areas: Irregular

Size of areas: 15 to 120 acres

Composition

Dothan and similar soils: 84 percent

Dissimilar soils: 16 percent

Typical Profile

Surface layer:

0 to 6 inches—brown loamy sand

Subsurface layer:

6 to 12 inches—yellowish brown loamy fine sand

Subsoil:

12 to 35 inches—strong brown sandy clay loam

35 to 80 inches—mottled light yellowish brown, yellowish brown, and light brownish gray clay loam that has about 5 percent, by volume, plinthite nodules

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate or moderately slow

Available water capacity: Moderate

Seasonal high water table: Perched, at a depth of 30 to 48 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield soils in the lower positions
- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions

Similar soils:

- Fuquay soils, which have a loamy layer at a depth of 20 to 40 inches, in positions similar to those of the Dothan soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 1
Ecological community: Mixed Hardwood and Pine

15—Dothan loamy sand, 2 to 5 percent slopes

Setting

Landscape: Coastal Plain
Landform: Ridges and hills
Shape of areas: Irregular
Size of areas: 5 to 45 acres

Composition

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

Typical Profile

Surface layer:
0 to 6 inches—brown loamy sand

Subsurface layer:
6 to 12 inches—yellowish brown loamy fine sand

Subsoil:
12 to 35 inches—strong brown sandy clay loam
35 to 80 inches—mottled light yellowish brown, yellowish brown, and light brownish gray clay loam that has about 5 percent, by volume, plinthite nodules

Soil Properties and Qualities

Drainage class: Well drained
Permeability: Moderate or moderately slow
Available water capacity: Moderate
Seasonal high water table: Perched, at a depth of 30 to 48 inches from January through March and from July through September
Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield soils in the lower positions
- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions

Similar soils:

- Fuquay soils, which have a loamy layer at a depth of 20 to 40 inches, in positions similar to those of the Dothan soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2e

Ecological community: Mixed Hardwood and Pine

17—Dothan-Fuquay complex, 8 to 12 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Dothan and similar soils: 40 percent

Fuquay and similar soils: 35 percent

Dissimilar soils: 25 percent

Typical Profile

Dothan

Surface layer:

0 to 6 inches—brown loamy sand

Subsurface layer:

6 to 12 inches—yellowish brown loamy fine sand

Subsoil:

12 to 35 inches—strong brown sandy clay loam

35 to 80 inches—mottled light yellowish brown, yellowish brown, and light brownish gray clay loam that has about 5 percent, by volume, plinthite nodules

Fuquay

Surface layer:

0 to 6 inches—dark grayish brown loamy sand

Subsurface layer:

6 to 26 inches—brown sand

Subsoil:

26 to 50 inches—reddish yellow sandy loam that has a few ironstone nodules

50 to 62 inches—mottled yellowish brown, brownish yellow, and light gray sandy clay loam that has about 7 percent, by volume, plinthite

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62 to 80 inches—mottled yellowish brown, brownish yellow, and light gray sandy clay loam that has about 15 percent, by volume, plinthite nodules

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate or moderately slow

Available water capacity: Moderate

Seasonal high water table: Perched, at a depth of 30 to 54 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Susceptible to erosion

Minor Components

Dissimilar soils:

- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions

Similar soils:

- Troup soils, which have a loamy layer below a depth of 40 inches, in positions similar to those of the major soils

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: Dothan—4e; Fuquay—3s

Ecological community: Mixed Hardwood and Pine

24—Goldsboro loamy sand, 0 to 2 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 10 to 75 acres

Composition

Goldsboro and similar soils: 90 percent

Dissimilar soils: 10 percent

Typical Profile

Surface layer:

0 to 4 inches—brown loamy sand

Subsurface layer:

4 to 14 inches—light yellowish brown loamy fine sand

Subsoil:

14 to 26 inches—yellowish brown sandy clay loam

26 to 48 inches—yellowish brown sandy clay loam that has yellowish red, strong brown, and light brownish gray mottles

48 to 72 inches—light olive brown sandy clay loam that has red, strong brown, light yellowish brown, and light brownish gray mottles

72 to 80 inches—light gray sandy loam that has yellowish brown and light olive brown mottles

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderate

Available water capacity: Moderate

Seasonal high water table: Perched, at a depth of 18 to 36 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Somewhat poorly drained Lynchburg soils in the lower positions

Similar soils:

- Moderately well drained Stilson soils, which have a loamy layer at a depth of 20 to 40 inches

Land Use

Dominant uses: Forestland (fig. 6)

Other uses: Wildlife habitat and cropland



Figure 6.—An excellent stand of planted pine in an area of map unit 24, Goldsboro loamy sand. (Photo courtesy of the U.S. Forest Service.)

Interpretive Groups

Land capability classification: 2w

Ecological community: Mixed Hardwood and Pine

25—Goldsboro loamy sand, 2 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 5 to 55 acres

Composition

Goldsboro and similar soils: 90 percent

Dissimilar soils: 10 percent

Typical Profile

Surface layer:

0 to 4 inches—brown loamy sand

Subsurface layer:

4 to 14 inches—light yellowish brown loamy fine sand

Subsoil:

14 to 26 inches—yellowish brown sandy clay loam

26 to 48 inches—yellowish brown sandy clay loam that has yellowish red, strong brown, and light brownish gray mottles

48 to 72 inches—light olive brown sandy clay loam that has red, strong brown, light yellowish brown, and light brownish gray mottles

72 to 80 inches—light gray sandy loam that has yellowish brown and light olive brown mottles

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Moderate

Available water capacity: Moderate

Seasonal high water table: Perched, at a depth of 18 to 36 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Somewhat poorly drained Lynchburg soils in the lower positions

Similar soils:

- Moderately well drained Stilson soils, which have a loamy layer at a depth of 20 to 40 inches

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2w

Ecological community: Mixed Hardwood and Pine

26—Foxworth sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and knolls

Shape of areas: Irregular

Size of areas: 10 to 160 acres

Composition

Foxworth and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:

0 to 9 inches—brown sand

Substratum:

9 to 37 inches—brownish yellow sand

37 to 54 inches—very pale brown sand

54 to 71 inches—very pale brown sand that has yellowish brown mottles

71 to 80 inches—light gray sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Moderately well drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 42 to 72 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils in the lower positions
- Excessively drained Lakeland soils in the slightly higher positions
- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Similar soils:

- Centenary soils, which have a hardpan (Bh horizon), in positions similar to those of the Foxworth soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 3s

Ecological community: Longleaf Pine-Turkey Oak Hills

27—Fuquay loamy sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain
Landform: Ridges and hills
Shape of areas: Irregular
Size of areas: 15 to more than 50 acres

Composition

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

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown loamy sand

Subsurface layer:
6 to 26 inches—brown sand

Subsoil:
26 to 50 inches—reddish yellow sandy loam that has a few ironstone nodules
50 to 62 inches—mottled yellowish brown, brownish yellow, and light gray sandy clay loam that has about 7 percent, by volume, plinthite
62 to 80 inches—mottled yellowish brown, brownish yellow, and light gray sandy clay loam that has about 15 percent, by volume, plinthite nodules

Soil Properties and Qualities

Drainage class: Well drained
Permeability: Moderate or moderately slow
Available water capacity: Moderate
Seasonal high water table: Perched, at a depth of 42 to 54 inches from January through March and from July through September
Flooding: None
Shrink-swell potential: Low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions

Similar soils:

- Troup soils, which have a loamy layer below a depth of 40 inches, in positions similar to those of the Fuquay soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2s
Ecological community: Mixed Hardwood and Pine

30—Ellore, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 250 acres

Composition

Ellore and similar soils: 35 percent

Bibb and similar soils: 30 percent

Meggett and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Ellore

Surface layer:

0 to 5 inches—very dark gray loamy sand

Subsurface layer:

5 to 29 inches—light brownish gray sand

Subsoil:

29 to 45 inches—light gray sandy loam that has yellowish brown and reddish yellow mottles

45 to 57 inches—light gray loamy sand that has yellowish brown mottles

57 to 80 inches—gray sand that has yellowish brown mottles

Bibb

Surface layer:

0 to 5 inches—very dark gray fine sandy loam

5 to 15 inches—dark grayish brown fine sandy loam

Substratum:

15 to 26 inches—dark grayish brown fine sandy loam

26 to 45 inches—gray sandy loam that has reddish yellow mottles

45 to 80 inches—gray loamy sand that has yellowish brown mottles

Meggett

Surface layer:

0 to 4 inches—very dark gray sandy loam

Subsurface layer:

4 to 13 inches—light brownish gray sandy loam

Subsoil:

13 to 21 inches—light gray sandy clay that has yellowish brown mottles

21 to 36 inches—gray clay that has yellowish brown and reddish yellow mottles

36 to 72 inches—olive gray clay that has yellowish brown mottles

72 to 80 inches—olive gray sandy clay that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Bibb and Ellore—moderate; Meggett—slow

Available water capacity: Low

Seasonal high water table: Ellore—apparent, at the surface to a depth of 6 inches

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from January through March and from July through September; Bibb—apparent, at a depth of 6 to 12 inches from January through March and from July through September; Meggett—apparent, at the surface to a depth of 12 inches from January through March and from July through September

Flooding: Frequent

Shrink-swell potential: Bibb and Elloree—low; Meggett—high

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration

Minor Components

Dissimilar soils:

- Wahee soils, which are better drained than the major soils, in the higher positions
- Very poorly drained Rutlege soils in the lower positions

Similar soils:

- Chowan soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Bibb—5w; Elloree and Meggett—6w

Ecological community: Bottomland Hardwoods

31—Hurricane and Chipley soils, 0 to 3 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 10 to 90 acres

Composition

Hurricane and similar soils: 45 percent

Chipley and similar soils: 35 percent

Dissimilar soils: 20 percent

Typical Profile

Hurricane

Surface layer:

0 to 8 inches—dark grayish brown sand

Subsurface layer:

8 to 24 inches—light yellowish brown sand

24 to 37 inches—light gray sand that has reddish yellow mottles

37 to 54 inches—light gray sand that has reddish yellow and yellowish red mottles

54 to 64 inches—pinkish gray sand that has yellowish red mottles

Subsoil:

64 to 80 inches—dark reddish brown sand that has black nodules

Chipley

Surface layer:

0 to 6 inches—dark brown sand

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Substratum:

6 to 19 inches—light yellowish brown sand

19 to 31 inches—light gray sand that has strong brown mottles

31 to 39 inches—light gray sand that has yellowish red and brownish yellow mottles

39 to 80 inches—white sand that has reddish yellow mottles

Soil Properties and Qualities

Drainage class: Somewhat poorly drained

Permeability: Moderately rapid

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 18 to 42 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Centenary and Foxworth soils in the higher positions
- Poorly drained Leon and Pottsburg soils in the lower positions

Similar soils:

- Soils that are similar to the major soils but have a thicker surface layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: Chipley—3s; Hurricane—3w

Ecological community: Mixed Hardwood and Pine

32—Plummer and Pelham soils

Setting

Landscape: Coastal Plain

Landform: Flats and depressions

Shape of areas: Irregular

Size of areas: 10 to more than 85 acres

Composition

Plummer and similar soils: 45 percent

Pelham and similar soils: 40 percent

Dissimilar soils: 15 percent

Typical Profile

Plummer

Surface layer:

0 to 10 inches—black sand

Subsurface layer:

10 to 46 inches—gray sand

46 to 55 inches—gray loamy sand

Soil Survey of Liberty County, Florida

Subsoil:

55 to 64 inches—light gray sandy loam that has yellowish brown mottles

64 to 80 inches—light gray sandy clay loam

Pelham

Surface layer:

0 to 7 inches—very dark brown loamy sand

Subsurface layer:

7 to 14 inches—grayish brown loamy fine sand

14 to 31 inches—light brownish gray loamy fine sand that has brown mottles

31 to 37 inches—light gray loamy fine sand that has yellowish brown mottles

Subsoil:

37 to 48 inches—light gray sandy loam that has brownish yellow mottles

48 to 80 inches—light brownish gray sandy clay loam that has yellowish red and yellowish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield and Lynchburg soils in the slightly higher positions

Similar soils:

- Poorly drained Rains soils, which have a loamy subsoil within a depth of 20 inches
- Poorly drained Pottsburg and Sapelo soils, which have a hardpan layer (Bh horizon), in positions similar to those of the major soils

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 5w

Ecological community: North Florida Flatwoods

34—Lakeland sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and hills

Shape of areas: Irregular

Size of areas: 10 to 150 acres

Composition

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

Typical Profile

Surface layer:
0 to 5 inches—brown sand

Substratum:
5 to 46 inches—brownish yellow sand
46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Excessively drained
Permeability: Rapid
Available water capacity: Low
Depth to seasonal high water table: Greater than 72 inches
Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Centenary and Foxworth soils in the slightly lower positions

Similar soils:

- Excessively drained Alpin soils, which have thin layers of loamy sand
- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 4s
Ecological community: Longleaf Pine-Turkey Oak Hills

35—Lakeland sand, 5 to 8 percent slopes

Setting

Landscape: Coastal Plain
Landform: Ridges and hillslopes
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

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

Typical Profile

Surface layer:
0 to 5 inches—brown sand

Substratum:

5 to 46 inches—brownish yellow sand

46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Excessively drained

Permeability: Rapid

Available water capacity: Low

Depth to seasonal high water table: Greater than 72 inches

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Foxworth soils in the slightly lower positions
- Moderately well drained Blanton soils, which have a loamy layer in the subsoil

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 6s

Ecological community: Longleaf Pine-Turkey Oak Hills

36—Lakeland sand, 8 to 15 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 10 to 60 acres

Composition

Lakeland and similar soils: 90 percent

Dissimilar soils: 10 percent

Typical Profile

Surface layer:

0 to 5 inches—brown sand

Subsoil:

5 to 46 inches—brownish yellow sand

46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Excessively drained

Permeability: Rapid

Available water capacity: Low

Depth to seasonal high water table: Greater than 72 inches

Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:
• Moderately well drained Foxworth soils in the slightly lower positions

Similar soils:
• Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Wildlife habitat
Other uses: Forestland

Interpretive Groups

Land capability classification: 6s
Ecological community: Longleaf Pine-Turkey Oak Hills

37—Lakeland-Foxworth complex, 15 to 30 percent slopes

Setting

Landscape: Coastal Plain
Landform: Hillslopes
Shape of areas: Irregular
Size of areas: 5 to 50 acres

Composition

Lakeland and similar soils: 50 percent
Foxworth and similar soils: 40 percent
Dissimilar soils: 10 percent

Typical Profile

Lakeland

Surface layer:
0 to 5 inches—brown sand

Substratum:
5 to 46 inches—brownish yellow sand
46 to 80 inches—yellow sand

Foxworth

Surface layer:
0 to 9 inches—brown sand

Substratum:
9 to 37 inches—brownish yellow sand
37 to 54 inches—very pale brown sand
54 to 71 inches—very pale brown sand that has yellowish brown mottles
71 to 80 inches—light gray sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Lakeland—excessively drained; Foxworth—moderately well drained
Permeability: Rapid

Soil Survey of Liberty County, Florida

Available water capacity: Low

Seasonal high water table: Lakeland—at a depth of greater than 72 inches;

Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Susceptible to erosion

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils in the slightly lower positions

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Lakeland—7s; Foxworth—7s

Ecological community: Longleaf Pine-Turkey Oak Hills

38—Leefield loamy sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 10 to 75 acres

Composition

Leefield and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 3 inches—very dark brown loamy sand

Subsurface layer:

3 to 8 inches—light olive brown sand

8 to 21 inches—yellow sand

Subsoil:

21 to 33 inches—yellow sandy loam that has yellowish brown and light brownish gray mottles

33 to 60 inches—yellowish brown sandy clay loam that has reddish brown and light gray mottles

60 to 80 inches—light gray sandy clay loam that has strong brown and reddish brown mottles and 10 percent, by volume, plinthite

Soil Properties and Qualities

Drainage class: Somewhat poorly drained

Permeability: Moderate to slow

Soil Survey of Liberty County, Florida

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 18 to 30 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Stilson and well drained Dothan soils in the higher positions

Similar soils:

- Albany soils, which have a loamy layer below a depth of 40 inches, in positions similar to those of the Leefield soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2w

Ecological community: Mixed Hardwood and Pine

39—Leon sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods

Shape of areas: Irregular

Size of areas: 10 to 100 acres

Composition

Leon and similar soils: 70 percent

Dissimilar soils: 30 percent

Typical Profile

Surface layer:

0 to 4 inches—dark brown sand

Subsurface layer:

4 to 18 inches—white sand

Subsoil:

18 to 27 inches—dark reddish brown sand

Substratum:

27 to 51 inches—brown sand

51 to 80 inches—white sand

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate or moderately slow

Available water capacity: Low

Soil Survey of Liberty County, Florida

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly well drained Chipley and Hurricane soils in the higher positions

Similar soils:

- Osier soils, which do not have a hardpan layer (Bh horizon), in positions similar to those of the Leon soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 4w

Ecological community: North Florida Flatwoods

42—Lucy sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and hills

Shape of areas: Irregular

Size of areas: 15 to more than 60 acres

Composition

Lucy and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 8 inches—dark grayish brown sand

Subsurface layer:

8 to 26 inches—strong brown sand

Subsoil:

26 to 80 inches—yellowish red sandy loam

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Moderate

Available water capacity: Moderate

Depth to seasonal high water table: Greater than 72 inches

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Blanton and Stilson soils in the slightly lower positions

Similar soils:

- Troup soils, which have a loamy layer below a depth of 40 inches, in positions similar to those of the Lucy soil

Land Use

Dominant uses: Forestland

Other uses: Cropland and wildlife

Interpretive Groups

Land capability classification: 2s

Ecological community: Mixed Hardwood and Pine

44—Lynchburg loamy sand

Setting

Landscape: Coastal Plain

Landform: Flats

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Lynchburg and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:

0 to 5 inches—very dark gray loamy sand

Subsurface layer:

5 to 9 inches—dark grayish brown fine sandy loam

9 to 14 inches—light olive brown fine sandy loam that has yellowish brown, yellowish red, and grayish brown mottles

Subsoil:

14 to 18 inches—light olive brown sandy clay loam that has yellowish brown, yellowish red, and grayish brown mottles

18 to 36 inches—grayish brown sandy clay loam that has yellowish brown, yellowish red, and brown mottles

36 to 48 inches—grayish brown sandy clay loam that has strong brown and yellowish red mottles

Substratum:

48 to 65 inches—dark gray clay loam that has yellowish brown and yellowish red mottles

65 to 80 inches—gray clay that has strong brown and reddish brown mottles

Soil Properties and Qualities

Drainage class: Somewhat poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 18 to 30 inches from January through March and from July through September

Soil Survey of Liberty County, Florida

Flooding: None
Shrink-swell potential: Low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Poorly drained Bladen and Rains soils in the slightly lower positions
- Moderately well drained Goldsboro soils in the higher positions

Similar soils:

- Leefield soils, which have a loamy layer at a depth of 20 to 40 inches, in positions similar to those of the Lynchburg soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2w
Ecological community: Mixed Hardwood and Pine

45—Lynn Haven sand

Setting

Landscape: Coastal Plain
Landform: Flatwoods
Shape of areas: Irregular
Size of areas: 10 to 60 acres

Composition

Lynn Haven and similar soils: 90 percent
Dissimilar soils: 10 percent

Typical Profile

Surface layer:
0 to 3 inches—black sand
3 to 14 inches—very dark gray fine sand

Subsurface layer:
14 to 29 inches—light gray fine sand

Subsoil:
29 to 35 inches—very dark gray fine sand

Substratum:
35 to 50 inches—light brownish gray fine sand
50 to 80 inches—light olive brown fine sand

Soil Properties and Qualities

Drainage class: Poorly drained
Permeability: Moderately rapid
Available water capacity: Low
Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Croatan, Dorovan, Pamlico, and Pickney soils in the lower positions

Similar soils:

- Leon soils, which do not have a dark, thick surface layer

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 4w
Ecological community: North Florida Flatwoods

46—Hurricane, Leon, and Albany soils

Setting

Landscape: Coastal Plain
Landform: Knolls and flatwoods
Shape of areas: Irregular
Size of areas: 10 to 90 acres

Composition

Hurricane and similar soils: 35 percent
Leon and similar soils: 30 percent
Albany and similar soils: 25 percent
Dissimilar soils: 10 percent

Typical Profile

Hurricane

Surface layer:
0 to 8 inches—dark grayish brown sand

Subsurface layer:
8 to 24 inches—light yellowish brown sand
24 to 37 inches—light gray sand that has reddish yellow mottles
37 to 54 inches—light gray sand that has reddish yellow and yellowish red mottles
54 to 64 inches—pinkish gray sand that has yellowish red mottles

Subsoil:
64 to 80 inches—dark reddish brown sand that has black nodules

Leon

Surface layer:
0 to 4 inches—dark brown sand

Subsurface layer:
4 to 18 inches—white sand

Soil Survey of Liberty County, Florida

Subsoil:

18 to 27 inches—dark reddish brown sand

Substratum:

27 to 51 inches—brown sand

51 to 80 inches—white sand

Albany

Surface layer:

0 to 6 inches—dark grayish brown sand

Subsurface layer:

6 to 22 inches—pale brown sand

22 to 31 inches—light yellowish brown loamy sand that has reddish yellow and light gray mottles

31 to 47 inches—light gray sand that has reddish yellow, light yellowish brown, and brownish yellow mottles

Subsoil:

47 to 80 inches—light gray fine sandy loam that has brownish yellow, reddish yellow, and yellowish brown mottles

Soil Properties and Qualities

Drainage class: Hurricane and Albany—somewhat poorly drained; Leon—poorly drained

Permeability: Moderate or moderately slow

Available water capacity: Low

Seasonal high water table: Hurricane—apparent, at a depth of 18 to 42 inches from January through March and from July through September; Leon—apparent, at a depth of 6 to 18 inches from January through March and from July through September; Albany—apparent, at depth from 12 to 42 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Centenary and Foxworth soils in the higher positions
- Somewhat poorly drained Chipley soils, which do not have a hardpan layer (Bh horizon) or a loamy layer

Similar soils:

- Soils that are similar to the major soils but have a thicker surface layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat, pasture (fig. 7), and cropland

Interpretive Groups

Land capability classification: Hurricane—3w; Leon—4w; Albany—3e

Ecological community: Hurricane and Albany—Mixed Hardwood and Pine; Leon—North Florida Flatwoods



Figure 7.—A pasture in an area of map unit 46, Hurricane, Leon, and Albany soils.

47—Torhunta-Lynn Haven-Croatan complex, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 100 acres

Composition

Torhunta and similar soils: 35 percent

Lynn Haven and similar soils: 30 percent

Croatan and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Torhunta

Surface layer:

0 to 13 inches—black fine sandy loam

Subsoil:

13 to 35 inches—dark gray fine sandy loam

Substratum:

35 to 52 inches—gray sand

52 to 80 inches—light gray sand

Lynn Haven

Surface layer:

0 to 3 inches—black sand

3 to 14 inches—very dark gray fine sand

Soil Survey of Liberty County, Florida

Subsurface layer:

14 to 29 inches—light gray fine sand

Subsoil:

29 to 35 inches—very dark gray fine sand

Substratum:

35 to 50 inches—light brownish gray fine sand

50 to 80 inches—light olive brown fine sand

Croatan

Surface layer:

0 to 48 inches—black muck

Substratum:

48 to 62 inches—light olive gray sandy loam

62 to 80 inches—greenish gray sandy clay

Soil Properties and Qualities

Drainage class: Torhunta and Croatan—very poorly drained; Lynn Haven—poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Torhunta—apparent, at the surface to a depth of 12 inches from January through March and from July through September; Lynn Haven—apparent, at the surface to a depth of 6 inches from January through March and from July through September; Croatan—apparent, at the surface to 12 inches above the surface from January through March, from July through September, and during November

Flooding: Frequent

Shrink-swell potential: Low

Content of organic matter in the surface layer: Torhunta and Lynn Haven—low; Croatan—high

Natural fertility: Low

Other distinctive properties: Flooding and/or ponding of 4 to 8 months duration

Minor Components

Dissimilar soils:

- Somewhat poorly drained Wahee soils in the higher positions on stream terraces

Similar soils:

- Leon and Rutlege soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Lynn Haven—4w; Croatan and Torhunta—7w

Ecological community: Bottomland Hardwoods

48—Meadowbrook sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods

Soil Survey of Liberty County, Florida

Shape of areas: Irregular
Size of areas: 10 to 30 acres

Composition

Meadowbrook and similar soils: 75 percent
Dissimilar soils: 25 percent

Typical Profile

Surface layer:
0 to 6 inches—black sand

Subsurface layer:
6 to 18 inches—light brownish gray sand that has brownish yellow mottles

Subsoil:
18 to 46 inches—brown sand
46 to 80 inches—light brownish gray sandy loam that has yellowish brown and reddish yellow mottles

Soil Properties and Qualities

Drainage class: Poorly drained
Permeability: Moderately slow
Available water capacity: Low
Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September
Flooding: None
Shrink-swell potential: Low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:
• Very poorly drained Pantego and Surrency soils in the lower positions

Similar soils:
• Goldhead soils, which have a loamy layer at a depth of 20 to 40 inches

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 4w
Ecological community: North Florida Flatwoods

49—Meadowbrook sand, slough

Setting

Landscape: Coastal Plain
Landform: Sloughs and drainageways (fig. 8)
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

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



Figure 8.—Pitcher plants in an area of map unit 49, Meadowbrook sand, slough. (Photo courtesy of the U.S. Forest Service.)

Typical Profile

Surface layer:

0 to 6 inches—black sand

Subsurface layer:

6 to 18 inches—light brownish gray sand that has brownish yellow mottles

Subsoil:

18 to 46 inches—brown sand

46 to 80 inches—light brownish gray sandy loam that has yellowish brown and reddish yellow mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderately slow

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Flooding: Frequent

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Rutlege and Surrency soils in the lower positions

Similar soils:

- Poorly drained soils that do not have a loamy layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 6w

Ecological community: Slough

54—Pelham loamy sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods and flats

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Pelham and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 7 inches—very dark brown loamy sand

Subsurface layer:

7 to 14 inches—grayish brown loamy fine sand

14 to 31 inches—light brownish gray loamy fine sand that has brown mottles

31 to 37 inches—light gray loamy fine sand that has yellowish brown mottles

Subsoil:

37 to 48 inches—light gray sandy loam that has brownish yellow mottles

48 to 80 inches—light brownish gray sandy clay loam that has yellowish red and yellowish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield and Lynchburg soils in the slightly higher positions

Similar soils:

- Poorly drained Rains soils, which have a loamy subsoil within a depth of 20 inches

Land Use

Dominant uses: Forestland (fig. 9)
Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 3w
Ecological community: North Florida Flatwoods

55—Plummer sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain
Landform: Flatwoods and flats
Shape of areas: Irregular
Size of areas: 10 to 40 acres

Composition

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

Typical Profile

Surface layer:
0 to 10 inches—black sand
Subsurface layer:
10 to 46 inches—gray sand
46 to 55 inches—gray loamy sand



Figure 9.—Planted pine in an area of map unit 54, Pelham loamy sand. The seedlings are planted on bedded rows to overcome a high water table in the soil. (Photo courtesy of the U.S. Forest Service.)

Soil Survey of Liberty County, Florida

Subsoil:

55 to 64 inches—light gray sandy loam that has yellowish brown mottles

64 to 80 inches—light gray sandy clay loam that has yellow mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 6 to 12 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield and Lynchburg soils in the slightly higher positions

Similar soils:

- Poorly drained Pelham soils, which have a loamy subsoil at a depth of 20 to 40 inches

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 4w

Ecological community: North Florida Flatwoods

56—Pottsburg sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Pottsburg and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:

0 to 2 inches—very dark gray sand

2 to 8 inches—dark grayish brown fine sand

Subsurface layer:

8 to 22 inches—light brownish gray fine sand that has strong brown mottles

22 to 50 inches—pale yellow fine sand that has strong brown mottles

50 to 57 inches—brown fine sand that has brownish yellow mottles

Subsoil:

57 to 67 inches—brown fine sand that has black nodules

67 to 80 inches—black fine sand

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils, which do not have a hardpan layer (Bh horizon), in the slightly higher positions
- Albany soils, which have loamy layers below a depth of 40 inches

Similar soils:

- Osier soils, which do not have a hardpan layer (Bh horizon), in positions similar to those of the Pottsburg soil
- Leon soils, which have a hardpan layer (Bh horizon) within a depth of 30 inches

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 4w

Ecological community: North Florida Flatwoods

57—Surrency, Pantego, and Croatan soils, depressional

Setting

Landscape: Coastal Plain

Landform: Depressions

Shape of areas: Irregular

Size of areas: 10 to more than 75 acres

Composition

Surrency and similar soils: 35 percent

Pantego and similar soils: 30 percent

Croatan and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Surrency

Surface layer:

0 to 13 inches—black loamy sand

Subsurface layer:

13 to 27 inches—gray sand

Subsoil:

27 to 44 inches—grayish brown sandy clay loam that has brownish yellow mottles

44 to 80 inches—light gray sandy loam that has yellowish brown mottles

Pantego

Surface layer:

0 to 16 inches—very dark gray fine sandy loam

Subsoil:

16 to 36 inches—dark gray sandy clay loam that has brownish yellow mottles

36 to 56 inches—light brownish gray sandy clay loam that has brownish yellow mottles

56 to 80 inches—light gray sandy clay loam that has brownish yellow and yellow mottles

Croatan

Surface layer:

0 to 48 inches—black muck

Substratum:

48 to 62 inches—light olive gray sandy loam

62 to 80 inches—greenish gray sandy clay

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to 12 inches above the surface from January through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Surrency and Pantego—medium; Croatan—high

Natural fertility: Low

Other distinctive properties: Ponding of 4 to 12 months duration

Minor Components

Dissimilar soils:

- Poorly drained Osier soils in the slightly higher positions

Similar soils:

- Rutlege soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Pantego and Surrency—6w; Croatan—7w

Ecological community: Swamp Hardwoods (fig. 10)

58—Rutlege, Bibb, and Surrency soils, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains and depressions

Shape of areas: Irregular

Size of areas: 10 to more than 150 acres

Composition

Rutlege and similar soils: 35 percent

Bibb and similar soils: 30 percent



Figure 10.—An area of map unit 57, Surrency, Pantego, and Croatan soils, depressional. The water table can be at or above the surface for long periods of time. (Photo courtesy of the U.S. Forest Service.)

Surrency and similar soils: 25 percent
Dissimilar soils: 10 percent

Typical Profile

Rutlege

Surface layer:

0 to 12 inches—black fine sand

Substratum:

12 to 30 inches—dark gray fine sand

30 to 60 inches—gray fine sand

60 to 80 inches—light gray fine sand

Bibb

Surface layer:

0 to 5 inches—very dark gray fine sandy loam

5 to 15 inches—dark grayish brown fine sandy loam

Substratum:

15 to 26 inches—dark grayish brown fine sandy loam

26 to 45 inches—gray sandy loam that has reddish yellow mottles

45 to 80 inches—gray loamy sand that has yellowish brown mottles

Surrency

Surface layer:

0 to 13 inches—black loamy sand

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Subsurface layer:

13 to 27 inches—gray sand

Subsoil:

27 to 44 inches—grayish brown sandy clay loam that has brownish yellow mottles

44 to 80 inches—light gray sandy loam that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Rutlege and Surrency—very poorly drained; Bibb—poorly drained

Permeability: Rutlege—rapid; Bibb and Surrency—moderate

Available water capacity: Low

Seasonal high water table: Rutlege and Surrency—apparent, at the surface to a depth of 6 inches from January through September; Bibb—apparent, at a depth of 6 to 12 inches from January through September

Flooding: Frequent

Shrink-swell potential: Low

Content of organic matter in the surface layer: Medium

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration

Minor Components

Dissimilar soils:

- Wahee soils, which are better drained than the major soils, in the higher positions

Similar soils:

- Pantego soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Rutlege and Bibb—5w; Surrency—6w

Ecological community: Swamp Hardwoods (fig. 11)

59—Hosford mucky coarse sand, 2 to 8 percent slopes

Setting

Landscape: Coastal Plain

Landform: Lower hillslopes

Shape of areas: Irregular

Size of areas: 10 to 40 acres

Composition

Hosford and similar soils: 80 percent

Dissimilar soils: 20 percent

Typical Profile

Surface layer:

0 to 4 inches—black mucky coarse sand

Subsurface layer:

4 to 66 inches—very dark grayish brown mucky coarse sand

Substratum:

66 to 80 inches—very dark grayish brown sand



Figure 11.—Cypress and pine trees on a flood plain in an area of map unit 58, Rutlege, Bibb, and Surrency soils, frequently flooded. (Photo courtesy of the U.S. Forest Service.)

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Medium

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley and Hurricane soils in the higher positions

Similar soils:

- Soils that are similar to the Hosford soil but have a thicker surface layer

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 5w

Ecological community: Wetland Hardwood Hammocks

60—Sapelo sand

Setting

Landscape: Coastal Plain
Landform: Flatwoods
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

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

Typical Profile

Surface layer:

0 to 5 inches—black sand

Subsurface layer:

5 to 12 inches—light brownish gray sand

Subsoil:

12 to 17 inches—reddish brown sand

17 to 40 inches—pale brown sand that has yellowish brown and light brownish gray mottles

40 to 51 inches—yellowish brown sand

51 to 80 inches—light gray sandy loam that has brownish yellow, grayish brown, and dark grayish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils, which do not have a hardpan layer (Bh horizon), in the slightly higher positions
- Very poorly drained Rutlege soils in small depressions

Similar soils:

- Osier soils, which do not have a hardpan layer (Bh horizon), in positions similar to those of the Sapelo soil
- Leon soils, which have a hardpan layer (Bh horizon) within a depth of 30 inches

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 4w
Ecological community: North Florida Flatwoods

61—Osier sand

Setting

Landscape: Coastal Plain
Landform: Flats
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

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

Typical Profile

Surface layer:
0 to 7 inches—dark gray sand

Substratum:
7 to 36 inches—gray fine sand
36 to 45 inches—light brownish gray fine sand that has pale brown mottles
45 to 68 inches—light brownish gray fine sand that has reddish yellow mottles
68 to 80 inches—light brownish gray fine sand that has brownish yellow mottles

Soil Properties and Qualities

Drainage class: Poorly drained
Permeability: Rapid
Available water capacity: Low
Seasonal high water table: Apparent, at the surface to a depth of 6 inches from
January through March and from July through September
Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Hosford and Rutlege soils in the slightly lower positions

Similar soils:

- Leon and Pottsburg soils, which have a hardpan layer (Bh horizon), in positions similar to those of the Osier soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 5w
Ecological community: North Florida Flatwoods

62—Scranton loamy sand, slough

Setting

Landscape: Coastal Plain
Landform: Sloughs and drainageways
Shape of areas: Irregular
Size of areas: 10 to 40 acres

Composition

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

Typical Profile

Surface layer:
0 to 9 inches—black loamy sand

Subsurface layer:
9 to 18 inches—dark gray fine sand that has olive brown mottles

Substratum:
18 to 23 inches—dark grayish brown fine sand that has light olive brown mottles
23 to 37 inches—grayish brown fine sand that has light olive brown and dark yellowish brown mottles
37 to 62 inches—mottled brownish yellow, dark grayish brown, and dark yellowish brown fine sand
62 to 80 inches—mottled dark grayish brown, brown, grayish brown, and very dark brown fine sand

Soil Properties and Qualities

Drainage class: Poorly drained
Permeability: Rapid
Available water capacity: Low
Seasonal high water table: Apparent, at the surface to a depth of 6 inches from January through March and from July through September
Flooding: Frequent
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Rutlege soils in the slightly lower positions

Similar soils:

- Meadowbrook soils, which have a loamy layer below a depth of 40 inches, in positions similar to those of the Scranton soil

Land Use

Dominant uses: Wildlife habitat
Other uses: Forestland

Interpretive Groups

Land capability classification: 6w
Ecological community: Slough

63—Stilson fine sand, 0 to 3 percent slopes

Setting

Landscape: Coastal Plain
Landform: Marine terraces
Shape of areas: Irregular
Size of areas: 20 to 60 acres

Composition

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

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown fine sand

Subsurface layer:
6 to 26 inches—light brownish gray sand

Subsoil:
26 to 30 inches—yellowish brown sandy loam that has a few ironstone nodules
30 to 38 inches—brownish yellow sandy clay loam that has light gray mottles
38 to 62 inches—brownish yellow sandy clay loam that has plinthite nodules and light brownish gray and light gray mottles
62 to 80 inches—olive yellow sandy clay loam that has plinthite nodules and light gray and light brownish gray mottles

Soil Properties and Qualities

Drainage class: Moderately well drained
Permeability: Moderate
Available water capacity: Low
Seasonal high water table: Perched, at a depth of 30 to 36 inches from January through March and from July through September
Flooding: None
Shrink-swell potential: Low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions
- Somewhat poorly drained Albany soils in the lower positions

Similar soils:

- Goldsboro soils, which have a loamy layer within a depth of 20 inches
- Moderately well drained soils that have a loamy layer below a depth of 40 inches

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: 2w
Ecological community: Mixed Hardwood and Pine

65—Pickney, Dorovan, and Bibb soils, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 150 acres

Composition

Pickney and similar soils: 40 percent

Dorovan and similar soils: 25 percent

Bibb and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Pickney

Surface layer:

0 to 27 inches—black mucky fine sand

Subsurface layer:

27 to 40 inches—black fine sand

Substratum:

40 to 47 inches—dark grayish brown fine sand

47 to 70 inches—grayish brown fine sand

70 to 80 inches—gray fine sand

Dorovan

Surface layer:

0 to 53 inches—black muck

Subsurface layer:

53 to 80 inches—black muck

Bibb

Surface layer:

0 to 5 inches—very dark gray fine sandy loam

5 to 15 inches—dark grayish brown fine sandy loam

Substratum:

15 to 26 inches—dark grayish brown fine sandy loam

26 to 45 inches—gray sandy loam that has reddish yellow mottles

45 to 80 inches—gray loamy sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Pickney and Dorovan—very poorly drained; Bibb—poorly drained

Permeability: Pickney—rapid; Dorovan and Bibb—moderate

Available water capacity: Low

Seasonal high water table: Pickney and Dorovan—apparent, at the surface to 12 inches above the surface from January through September; Bibb—apparent, at a depth of 6 to 12 inches from January through September

Flooding: Frequent

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Pickney and Bibb—medium; Dorovan—high

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration; shrinkage due to oxidation of the muck in the Dorovan soil

Minor Components

Dissimilar soils:

- Wahee soils, which are better drained than the major soils, in the higher positions

Similar soils:

- Rutledge soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Pickney and Dorovan—7w; Bibb—5w

Ecological community: Swamp Hardwoods

66—Wahee and Ochlockonee soils, 0 to 3 percent slopes, occasionally flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains and stream terraces

Shape of areas: Irregular

Size of areas: 10 to more than 75 acres

Composition

Wahee and similar soils: 45 percent

Ochlockonee and similar soils: 35 percent

Dissimilar soils: 20 percent

Typical Profile

Wahee

Surface layer:

0 to 6 inches—light olive brown sandy loam

Subsurface layer:

6 to 14 inches—brown fine sandy loam

Subsoil:

14 to 19 inches—yellowish brown sandy clay that has light brownish gray mottles

19 to 36 inches—gray clay that has yellowish brown mottles

36 to 80 inches—gray sandy clay that has yellowish brown mottles

Ochlockonee

Surface layer:

0 to 6 inches—dark yellowish brown loamy sand

Substratum:

6 to 35 inches—mottled strong brown and yellowish brown loamy fine sand

35 to 45 inches—mottled very pale brown and light yellowish brown loamy fine sand

45 to 80 inches—stratified yellowish brown sandy loam and loamy sand having strong brown and light gray mottles

Soil Properties and Qualities

Drainage class: Wahee—somewhat poorly drained; Ochlockonee—well drained

Permeability: Wahee—slow; Ochlockonee—moderately rapid

Available water capacity: Wahee—moderate; Ochlockonee—low

Soil Survey of Liberty County, Florida

Seasonal high water table: Wahee—apparent, at a depth of 18 to 30 inches from January through March and from July through September; Ochlockonee—apparent, at a depth of 36 to 60 inches from January through March and from July through September

Flooding: Occasional

Shrink-swell potential: Wahee—moderate; Ochlockonee—low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 1 month duration

Minor Components

Dissimilar soils:

- Brickyard and Chowan soils, which are more poorly drained than the major soils, in the lower positions

Similar soils:

- Garcon and Ousley soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Wahee—4w; Ochlockonee—2w

Ecological community: Bottomland Hardwoods

67—Goldhead sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Goldhead and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 6 inches—very dark brown sand

Subsurface layer:

6 to 13 inches—grayish brown sand

13 to 32 inches—light brownish gray sand that has brown mottles

Subsoil:

32 to 56 inches—light gray sandy clay loam that has brownish yellow mottles

Substratum:

56 to 80 inches—light brownish gray sand that has yellowish red and yellowish brown mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Soil Survey of Liberty County, Florida

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Pantego and Surrency soils, which have a thicker surface layer than the Goldhead soil, in the slightly lower positions

Similar soils:

- Meadowbrook soils, which have a loamy subsoil below a depth of 40 inches, in positions similar to those of the Goldhead soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 3w

Ecological community: North Florida Flatwoods

68—Goldhead-Meadowbrook complex, depressional

Setting

Landscape: Coastal Plain

Landform: Depressions

Shape of areas: Irregular

Size of areas: 5 to 30 acres

Composition

Goldhead and similar soils: 45 percent

Meadowbrook and similar soils: 40 percent

Dissimilar soils: 15 percent

Typical Profile

Goldhead

Surface layer:

0 to 6 inches—very dark brown sand

Subsurface layer:

6 to 13 inches—grayish brown sand

13 to 32 inches—light brownish gray sand that has brown mottles

Subsoil:

32 to 56 inches—light gray sandy clay loam that has brownish yellow mottles

Substratum:

56 to 80 inches—light brownish gray sand that has yellowish red and yellowish brown mottles

Meadowbrook

Surface layer:

0 to 6 inches—black sand

Soil Survey of Liberty County, Florida

Subsurface layer:

6 to 18 inches—light brownish gray sand that has brownish yellow mottles

Subsoil:

18 to 46 inches—brown sand

46 to 80 inches—light brownish gray sandy loam that has yellowish brown and reddish yellow mottles

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to 12 inches above the surface from January through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Poorly drained Goldhead soils on the edges of the depressions

Similar soils:

- Very poorly drained Pantego and Surrency soils, which have a thicker surface layer than the major soils, in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 7w

Ecological community: Swamp Hardwoods

69—Troup sand, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and hills

Shape of areas: Irregular

Size of areas: 15 to 100 acres

Composition

Troup and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 5 inches—dark grayish brown sand

Subsurface layer:

5 to 35 inches—yellowish brown sand

35 to 60 inches—strong brown loamy sand

Soil Survey of Liberty County, Florida

Subsoil:

60 to 80 inches—yellowish red sandy loam

Soil Properties and Qualities

Drainage class: Somewhat excessively drained

Permeability: Moderate

Available water capacity: Low

Depth to seasonal high water table: Greater than 72 inches

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions
- Soils that are similar to the Troup soil but have slopes of greater than 5 percent

Similar soils:

- Fuquay soils, which have a loamy layer at a depth of 20 to 40 inches, in positions similar to those of the Troup soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland (fig. 12)

Interpretive Groups

Land capability classification: 3s

Ecological community: Longleaf Pine-Turkey Oak Hills



Figure 12.—A commercial crop of tomatoes in an area of map unit 69, Troup sand, 0 to 5 percent slopes. (Photo courtesy of the U.S. Forest Service.)

70—Troup sand, 5 to 8 percent slopes

Setting

Landscape: Coastal Plain
Landform: Hillslopes
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

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

Typical Profile

Surface layer:
0 to 5 inches—dark grayish brown sand

Subsurface layer:
5 to 35 inches—yellowish brown sand
35 to 60 inches—strong brown loamy sand

Subsoil:
60 to 80 inches—yellowish red sandy loam

Soil Properties and Qualities

Drainage class: Somewhat excessively drained
Permeability: Moderate
Available water capacity: Low
Depth to seasonal high water table: Greater than 72 inches
Flooding: None
Shrink-swell potential: Low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Blanton, Goldsboro, and Stilson soils in the slightly lower positions
- Soils that are similar to the Troup soil but have slopes of greater than 8 percent

Similar soils:

- Fuquay soils, which have a loamy layer at a depth of 20 to 40 inches, in positions similar to those of the Troup soil

Land Use

Dominant uses: Forestland
Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 4s
Ecological community: Longleaf Pine-Turkey Oak Hills

71—Pits

Setting

Landscape: Coastal Plain
Landform: Borrow pits

Shape of areas: Rectangular or subrounded
Size of areas: 1 to 15 acres

Composition

Pits: 98 percent
Dissimilar areas: 2 percent

Typical Profile

This map unit consists of open excavations from which the original soil and underlying material have been removed for use at another location. Most areas are barren of native vegetation. Some areas may contain water.

Soil Properties and Qualities

Drainage class: Variable
Permeability: Variable
Available water capacity: Variable
Seasonal high water table: Variable
Flooding: None to rare
Shrink-swell potential: Variable
Content of organic matter in the surface layer: Very low
Natural fertility: Low
Other distinctive properties: None

Minor Components

- Blanton, Fuquay, Goldsboro, Stilson, Troup, and other soils on the edges of the pits

Land Use

Dominant uses: Source of fill material
Other uses: Unsuitable to most other uses

Interpretive Groups

Land capability classification: 8s
Ecological community: None assigned

72—Lakeland sand, 30 to 85 percent slopes

Setting

Landscape: Coastal Plain
Landform: Hillslopes
Shape of areas: Irregular
Size of areas: 10 to 50 acres

Composition

Lakeland and similar soils: 75 percent
Dissimilar soils: 25 percent

Typical Profile

Surface layer:
0 to 5 inches—brown sand
Substratum:
5 to 46 inches—brownish yellow sand
46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Excessively drained
Permeability: Rapid
Available water capacity: Low
Depth to seasonal high water table: Greater than 72 inches
Flooding: None
Shrink-swell potential: Very low
Content of organic matter in the surface layer: Low
Natural fertility: Low
Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils at the bottom of the hillslopes
- Soils that are similar to the Lakeland soil but have slopes of less than 30 percent
- Gullied land

Similar soils:

- Moderately well drained Foxworth soils in the slightly lower positions

Land Use

Dominant uses: Wildlife habitat
Other uses: Forestland

Interpretive Groups

Land capability classification: 7s
Ecological community: Longleaf Pine-Turkey Oak Hills

73—Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes

Setting

Landscape: Coastal Plain
Landform: Hillslopes
Shape of areas: Irregular
Size of areas: 5 to 50 acres

Composition

Foxworth and similar soils: 45 percent
Hosford and similar soils: 25 percent
Lucy and similar soils: 20 percent
Dissimilar soils: 10 percent

Typical Profile

Foxworth

Surface layer:
0 to 9 inches—brown sand

Substratum:

9 to 37 inches—brownish yellow sand
37 to 54 inches—very pale brown sand
54 to 71 inches—very pale brown sand that has yellowish brown mottles
71 to 80 inches—light gray sand that has yellowish brown mottles

Soil Survey of Liberty County, Florida

Hosford

Surface layer:

0 to 4 inches—black mucky coarse sand

Subsurface layer:

4 to 66 inches—dark grayish brown mucky coarse sand

Substratum:

66 to 80 inches—very dark grayish brown sand

Lucy

Surface layer:

0 to 8 inches—dark grayish brown sand

Subsurface layer:

8 to 26 inches—strong brown sand

Subsoil:

26 to 80 inches—yellowish red sandy loam

Soil Properties and Qualities

Drainage class: Foxworth—moderately well drained; Hosford—very poorly drained;
Lucy—well drained

Permeability: Foxworth—rapid; Hosford and Lucy—moderate

Available water capacity: Low

Seasonal high water table: Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September; Hosford—apparent, at the surface to a depth of 6 inches from January through March and from July through September; Lucy—at a depth of greater than 72 inches

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Foxworth and Lucy—low; Hosford—medium

Natural fertility: Low

Other distinctive properties: Foxworth and Lucy—susceptible to erosion; Hosford—located at the bottom of the slope in a seepage area that remains wet for long periods

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils in positions that are slightly lower than those of the Foxworth and Lucy soils but higher than those of the Hosford soil

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy layer below a depth of 40 inches in the subsoil

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Foxworth and Lucy—7s; Hosford—6w

Ecological community: Foxworth and Lucy—Longleaf Pine-Turkey Oak Hills;
Hosford—Wetland Hardwood Hammocks

74—Garcon, Ochlockonee, and Ousley soils, occasionally flooded

Setting

Landscape: Coastal Plain

Landform: Stream terraces and flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 100 acres

Composition

Garcon and similar soils: 40 percent

Ochlockonee and similar soils: 25 percent

Ousley and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Garcon

Surface layer:

0 to 8 inches—very dark grayish brown fine sand

Subsurface layer:

8 to 22 inches—brown fine sand that has yellowish brown mottles

Subsoil:

22 to 31 inches—yellowish brown fine sandy loam that has light brownish gray and yellowish brown mottles

31 to 44 inches—gray fine sandy loam that has yellowish brown and yellowish red mottles

44 to 80 inches—light gray fine sand that has yellowish brown mottles

Ochlockonee

Surface layer:

0 to 6 inches—dark yellowish brown loamy sand

Substratum:

6 to 35 inches—mottled strong brown and yellowish brown loamy fine sand

35 to 45 inches—mottled very pale brown and light yellowish brown loamy fine sand

45 to 80 inches—stratified yellowish brown sandy loam and loamy sand having strong brown and light gray mottles

Ousley

Surface layer:

0 to 7 inches—very dark grayish brown sand

Substratum:

7 to 25 inches—yellowish brown sand

25 to 38 inches—light yellowish brown sand that has strong brown and light gray mottles

38 to 57 inches—light gray sand that has strong brown and brownish yellow mottles

57 to 80 inches—light gray sand that has strong brown mottles

Soil Properties and Qualities

Drainage class: Garcon and Ousley—somewhat poorly drained; Ochlockonee—well drained

Permeability: Garcon and Ochlockonee—moderate; Ousley—rapid

Available water capacity: Garcon and Ochlockonee—low; Ousley—rapid

Soil Survey of Liberty County, Florida

Seasonal high water table: Garcon and Ousley—apparent, at a depth of 18 to 36 inches from January through March and from July through September;
Ochlockonee—apparent, at a depth of 36 to 60 inches from January through March and from July through September

Flooding: Occasional

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 1 month duration

Minor Components

Dissimilar soils:

- Brickyard and Chowan soils, which are more poorly drained than the major soils, in the lower positions

Similar soils:

- Wahee soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Garcon and Ochlockonee—2w; Ousley—3w

Ecological community: Bottomland Hardwoods

75—Brantley-Okeelala-Lucy complex, 8 to 45 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 5 to 50 acres

Composition

Brantley and similar soils: 35 percent

Okeelala and similar soils: 30 percent

Lucy and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Brantley

Surface layer:

0 to 6 inches—brown fine sandy loam

Subsurface layer:

6 to 11 inches—yellowish brown fine sandy loam

Substratum:

11 to 35 inches—yellowish red clay

35 to 43 inches—yellowish red clay loam that has yellowish brown mottles

43 to 57 inches—strong brown sandy clay loam that has yellowish brown and yellowish red mottles

57 to 80 inches—yellowish brown sandy loam that has strong brown and yellowish red mottles

Okeelala

Surface layer:

0 to 7 inches—brown sandy loam

Subsurface layer:

7 to 16 inches—light yellowish brown sandy loam

Substratum:

16 to 42 inches—yellowish red sandy clay loam

42 to 52 inches—yellowish red sandy clay loam that has yellowish brown mottles

52 to 80 inches—yellowish brown fine sandy loam that has strong brown mottles

Lucy

Surface layer:

0 to 8 inches—dark grayish brown sand

Subsurface layer:

8 to 26 inches—strong brown sand

Subsoil:

26 to 80 inches—yellowish red sandy loam

Soil Properties and Qualities

Drainage class: Well drained

Permeability: Brantley—slow; Okeelala and Lucy—moderate

Available water capacity: Moderate

Depth to seasonal high water table: Greater than 72 inches

Flooding: None

Shrink-swell potential: Brantley—moderate; Okeelala and Lucy—low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Soils that are similar to the major soils but have slopes of less than 8 percent

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy layer below a depth of 40 inches in the subsoil

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Brantley and Okeelala—7e; Lucy—4s

Ecological community: Mixed Hardwood and Pine

78—Lucy-Blanton-Cowarts complex, 8 to 45 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 5 to 70 acres

Composition

Lucy and similar soils: 35 percent
Blanton and similar soils: 30 percent
Cowarts and similar soils: 25 percent
Dissimilar soils: 10 percent

Typical Profile

Lucy

Surface layer:

0 to 8 inches—dark grayish brown sand

Subsurface layer:

8 to 26 inches—strong brown sand

Subsoil:

26 to 80 inches—yellowish red sandy loam

Blanton

Surface layer:

0 to 8 inches—light brownish gray sand

Subsurface layer:

8 to 43 inches—light yellowish brown sand

43 to 59 inches—very pale brown sand

Subsoil:

59 to 73 inches—brownish yellow loamy sand that has pockets of white sand

73 to 80 inches—pale brown fine sandy loam that has pockets of white sand and a few strong brown plinthite nodules

Cowarts

Surface layer:

0 to 8 inches—dark grayish brown fine sandy loam

Subsurface layer:

8 to 12 inches—yellowish brown fine sandy loam

Subsoil:

12 to 25 inches—yellowish brown sandy clay loam that has yellowish red and red mottles

Substratum:

25 to 80 inches—mottled red, yellowish brown, and gray sandy clay loam

Soil Properties and Qualities

Drainage class: Lucy—well drained; Blanton and Cowarts—moderately well drained

Permeability: Moderate

Available water capacity: Lucy and Cowarts—moderate; Blanton—very low

Seasonal high water table: Lucy and Cowarts—at a depth of greater than 72 inches;
Blanton—apparent, at a depth of 42 to 66 inches from January through March
and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Severe slope

Minor Components

Dissimilar soils:

- Soils that are similar to the major soils but have slopes of less than 8 percent

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy layer below a depth of 40 inches in the subsoil

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Blanton and Lucy—7s; Cowarts—6e

Ecological community: Mixed Hardwood and Pine

81—Scranton fine sand

Setting

Landscape: Coastal Plain

Landform: Flatwoods

Shape of areas: Irregular

Size of areas: 10 to 75 acres

Composition

Scranton and similar soils: 85 percent

Dissimilar soils: 15 percent

Typical Profile

Surface layer:

0 to 9 inches—black fine sand

Subsurface layer:

9 to 18 inches—dark gray fine sand that has olive brown mottles

Substratum:

18 to 23 inches—dark grayish brown fine sand that has light olive brown mottles

23 to 37 inches—grayish brown fine sand that has light olive brown and dark yellowish brown mottles

37 to 62 inches—mottled brownish yellow, dark grayish brown, and dark yellowish brown fine sand

62 to 80 inches—mottled dark grayish brown, brown, grayish brown, and very dark brown fine sand

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Very poorly drained Rutlege soils in the slightly lower positions

Similar soils:

- Leon soils, which have a hardpan layer (Bh horizon) within a depth of 30 inches, in positions similar to those of the Scranton soil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 3w

Ecological community: North Florida Flatwoods

82—Brickyard and Chowan soils, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to more than 100 acres

Composition

Brickyard and similar soils: 55 percent

Chowan and similar soils: 35 percent

Dissimilar soils: 10 percent

Typical Profile

Brickyard

Surface layer:

0 to 4 inches—brown clay loam

Substratum:

4 to 8 inches—grayish brown clay

8 to 50 inches—light gray clay

50 to 80 inches—bluish gray clay

Chowan

Surface layer:

0 to 5 inches—very dark grayish brown silty clay loam

Substratum:

5 to 35 inches—gray silty clay loam that has strong brown mottles

35 to 80 inches—black muck

Soil Properties and Qualities

Drainage class: Brickyard—very poorly drained; Chowan—poorly drained

Permeability: Brickyard—very slow; Chowan—moderately slow

Available water capacity: Moderate

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through September

Flooding: Frequent

Shrink-swell potential: Brickyard—moderate to high; Chowan—low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration

Minor Components

Dissimilar soils:

- Garcon, Ochlockonee, Ousley, and Wahee soils, which are better drained than the major soils, in the higher positions

Similar soils:

- Soils that do not have clayey material within a depth of 20 inches

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 7w

Ecological community: Bottomland Hardwoods

83—Plummer, Sapelo, and Pottsburg soils

Setting

Landscape: Coastal Plain

Landform: Flatwoods and flats

Shape of areas: Irregular

Size of areas: 10 to more than 100 acres

Composition

Plummer and similar soils: 35 percent

Sapelo and similar soils: 30 percent

Pottsburg and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Plummer

Surface layer:

0 to 10 inches—black sand

Subsurface layer:

10 to 46 inches—gray sand

46 to 55 inches—gray loamy sand

Subsoil:

55 to 64 inches—light gray sandy loam that has yellowish brown mottles

64 to 80 inches—light gray sandy clay loam

Sapelo

Surface layer:

0 to 5 inches—black sand

Subsurface layer:

5 to 12 inches—light brownish gray sand

Subsoil:

12 to 17 inches—reddish brown sand

17 to 40 inches—pale brown sand that has yellowish brown and light brownish gray mottles

40 to 51 inches—yellowish brown sand

51 to 80 inches—light gray sandy loam that has brownish yellow, grayish brown, and dark grayish brown mottles

Pottsburg

Surface layer:

0 to 2 inches—very dark gray sand

2 to 8 inches—dark grayish brown fine sand

Subsurface layer:

8 to 22 inches—light brownish gray fine sand

22 to 50 inches—pale yellow fine sand that has strong brown mottles

50 to 57 inches—brown fine sand that has brownish yellow mottles

Subsoil:

57 to 67 inches—brown fine sand that has black nodules

67 to 80 inches—black fine sand

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Plummer—apparent, at the surface to a depth of 6 inches from January through March and from July through September; Sapelo and Pottsburg—apparent, at a depth of 6 to 18 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Centenary and Foxworth soils in the higher positions

Similar soils:

- Soils that are similar to the major soils but have a thicker surface layer

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 4w

Ecological community: North Florida Flatwoods

91—Woodington loamy sand

Setting

Landscape: Coastal Plain

Landform: Flats

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Woodington and similar soils: 90 percent

Dissimilar soils: 10 percent

Typical Profile

Surface layer:

0 to 3 inches—dark gray loamy sand

Subsurface layer:

3 to 13 inches—gray fine sandy loam that has yellowish brown mottles

Subsoil:

13 to 48 inches—gray fine sandy loam that has strong brown mottles

48 to 80 inches—gray fine sandy loam that has yellowish brown, strong brown, and yellow mottles

Soil Properties and Qualities

Drainage class: Poorly drained

Permeability: Moderately rapid

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to a depth of 12 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Leefield and Lynchburg soils in the slightly higher positions

Similar soils:

- Poorly drained Pelham soils, which have a loamy subsoil at a depth of 20 to 40 inches

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: 6w

Ecological community: North Florida Flatwoods

92—Pamlico-Pickney complex, frequently flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains

Shape of areas: Irregular

Size of areas: 10 to 60 acres

Composition

Pamlico and similar soils: 50 percent

Pickney and similar soils: 35 percent

Dissimilar soils: 15 percent

Typical Profile

Pamlico

Surface layer:

0 to 45 inches—black muck

Substratum:

45 to 80 inches—gray sand that has a few lenses of very dark brown loamy sand

Pickney

Surface layer:

0 to 27 inches—black mucky fine sand

Subsoil:

27 to 40 inches—black fine sand

Substratum:

40 to 47 inches—dark grayish brown fine sand

47 to 70 inches—grayish brown fine sand

70 to 80 inches—gray fine sand

Soil Properties and Qualities

Drainage class: Very poorly drained

Permeability: Pamlico—moderate; Pickney—rapid

Available water capacity: Low

Seasonal high water table: Apparent, at the surface to 12 inches above the surface year-round

Flooding: Frequent

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Pamlico—high; Pickney—medium

Natural fertility: Low

Other distinctive properties: Flooding of up to 4 months duration; shrinkage due to oxidation of the muck in the Pamlico soil

Minor Components

Dissimilar soils:

- Wahee and Garcon soils, which are better drained than the major soils, in the higher positions

Similar soils:

- Rutledge and Dorovan soils in positions similar to those of the major soils

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: 7w

Ecological community: Swamp Hardwoods

95—Bibb, Rains, and Garcon soils, occasionally flooded

Setting

Landscape: Coastal Plain

Landform: Flood plains and stream terraces

Shape of areas: Irregular

Size of areas: 10 to 50 acres

Composition

Bibb and similar soils: 40 percent

Rains and similar soils: 25 percent

Garcon and similar soils: 25 percent

Dissimilar soils: 10 percent

Typical Profile

Bibb

Surface layer:

0 to 5 inches—very dark gray fine sandy loam

5 to 15 inches—dark grayish brown fine sandy loam

Substratum:

15 to 26 inches—dark grayish brown fine sandy loam

26 to 45 inches—gray sandy loam that has reddish yellow mottles

45 to 80 inches—gray loamy sand that has yellowish brown mottles

Rains

Surface layer:

0 to 4 inches—dark grayish brown sandy loam

Subsurface layer:

4 to 13 inches—grayish brown sandy loam that has brown mottles

Subsoil:

13 to 35 inches—light brownish gray sandy clay loam that has yellowish brown and dark yellowish brown mottles

35 to 65 inches—light gray sandy clay loam that has yellowish brown mottles

65 to 80 inches—light gray sandy clay that has yellowish brown mottles

Garcon

Surface layer:

0 to 8 inches—very dark grayish brown fine sand

Subsurface layer:

8 to 22 inches—brown fine sand that has yellowish brown mottles

Subsoil:

22 to 31 inches—yellowish brown fine sandy loam that has light brownish gray and yellowish brown mottles

31 to 44 inches—gray fine sandy loam that has yellowish brown and yellowish red mottles

Substratum:

44 to 80 inches—light gray fine sand that has yellowish brown mottles

Soil Properties and Qualities

Drainage class: Bibb and Rains—poorly drained; Garcon—somewhat poorly drained

Permeability: Moderate

Available water capacity: Low

Seasonal high water table: Bibb—apparent, at a depth of 6 to 12 inches from January through March and from July through September; Rains—apparent, at the surface to a depth of 12 inches from January through March and from July through September; Garcon—apparent, at a depth of 18 to 36 inches from January through March and from July through September

Flooding: Occasional

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Flooding of up to 1 month duration

Minor Components

Dissimilar soils:

- Very poorly drained Brickyard soils in the lower positions
- Well drained Ochlockonee soils in the higher positions

Similar soils:

- Soils that are similar to the major soils but have a thick, dark surface layer

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Bibb—5w; Garcon—2w; Rains—4w

Ecological community: Bottomland Hardwoods

96—Foxworth-Lakeland complex, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Ridges and hills

Shape of areas: Irregular

Size of areas: 5 to 40 acres

Composition

Foxworth and similar soils: 50 percent

Lakeland and similar soils: 40 percent

Dissimilar soils: 10 percent

Typical Profile

Foxworth

Surface layer:

0 to 9 inches—brown sand

Substratum:

9 to 37 inches—brownish yellow sand

37 to 54 inches—very pale brown sand

54 to 71 inches—very pale brown sand that has yellowish brown mottles

71 to 80 inches—light gray sand that has yellowish brown mottles

Lakeland

Surface layer:

0 to 5 inches—brown sand

Substratum:

5 to 46 inches—brownish yellow sand

46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Foxworth—moderately well drained; Lakeland—excessively drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September; Lakeland—at a depth of greater than 72 inches

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils in the slightly lower positions

Similar soils:

- Excessively drained Alpin soils, which have thin layers of loamy sand

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat

Interpretive Groups

Land capability classification: Foxworth—3s; Lakeland—4s

Ecological community: Longleaf Pine-Turkey Oak Hills

97—Foxworth-Lakeland complex, 5 to 15 percent slopes

Setting

Landscape: Coastal Plain

Landform: Hillslopes

Shape of areas: Irregular

Size of areas: 5 to 20 acres

Composition

Foxworth and similar soils: 45 percent

Lakeland and similar soils: 40 percent

Dissimilar soils: 15 percent

Typical Profile

Foxworth

Surface layer:

0 to 9 inches—brown sand

Substratum:

9 to 37 inches—brownish yellow sand

37 to 54 inches—very pale brown sand

54 to 71 inches—very pale brown sand that has yellowish brown mottles

71 to 80 inches—light gray sand that has yellowish brown mottles

Lakeland

Surface layer:

0 to 5 inches—brown sand

Substratum:

5 to 46 inches—brownish yellow sand

46 to 80 inches—yellow sand

Soil Properties and Qualities

Drainage class: Foxworth—moderately well drained; Lakeland—excessively drained

Permeability: Rapid

Available water capacity: Low

Seasonal high water table: Foxworth—apparent, at a depth of 42 to 72 inches from January through March and from July through September; Lakeland—at a depth of greater than 72 inches

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: Susceptible to erosion

Minor Components

Dissimilar soils:

- Somewhat poorly drained Chipley soils in the slightly lower positions

Similar soils:

- Somewhat excessively drained Troup soils, which have a loamy subsurface layer

Land Use

Dominant uses: Wildlife habitat

Other uses: Forestland

Interpretive Groups

Land capability classification: Foxworth—4s; Lakeland—6s

Ecological community: Longleaf Pine-Turkey Oak Hills

98—Leon-Chipley complex

Setting

Landscape: Coastal Plain

Landform: Knolls and flatwoods

Shape of area: Irregular

Size of area: 5 acres

Composition

Leon and similar soils: 45 percent

Chipley and similar soils: 30 percent

Dissimilar soils: 25 percent

Typical Profile

Leon

Surface layer:

0 to 4 inches—dark brown sand

Subsurface layer:

4 to 18 inches—white sand

Subsoil:

18 to 27 inches—dark reddish brown sand

Substratum:

27 to 51 inches—brown sand

51 to 80 inches—white sand

Chipley

Surface layer:

0 to 6 inches—dark brown sand

Substratum:

6 to 19 inches—light yellowish brown sand

19 to 31 inches—light gray sand that has strong brown mottles

31 to 39 inches—light gray sand that has yellowish red and brownish yellow mottles

39 to 80 inches—white sand that has reddish yellow mottles

Soil Properties and Qualities

Drainage class: Leon—poorly drained; Chipley—somewhat poorly drained

Permeability: Leon—moderate or moderately slow; Chipley—rapid

Available water capacity: Low

Seasonal high water table: Leon—apparent, at a depth of 6 to 18 inches from January through March and from July through September; Chipley—18 to 42 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Very low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Moderately well drained Centenary and Foxworth soils in the higher positions

Similar soils:

- Osier soils, which do not have a hardpan layer (Bh horizon), in positions similar to those of the major soils

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: Leon—4w; Chipley—3s

Ecological community: Leon—North Florida Flatwoods; Chipley—Mixed Hardwood and Pine

101—Albany-Blanton complex, 0 to 5 percent slopes

Setting

Landscape: Coastal Plain

Landform: Knolls and rises

Shape of areas: Irregular

Size of areas: 10 to 35 acres

Composition

Albany and similar soils: 55 percent

Blanton and similar soils: 30 percent

Dissimilar soils: 15 percent

Typical Profile

Albany

Surface layer:

0 to 6 inches—dark grayish brown sand

Subsurface layer:

6 to 22 inches—pale brown sand

22 to 31 inches—light yellowish brown loamy sand that has reddish yellow and light gray mottles

31 to 47 inches—light gray sand that has reddish yellow, yellowish brown, and brownish yellow mottles

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Subsoil:

47 to 80 inches—light gray fine sandy loam that has brownish yellow, reddish yellow, and yellowish brown mottles

Blanton

Surface layer:

0 to 8 inches—light brownish gray sand

Subsurface layer:

8 to 43 inches—light yellowish brown sand

43 to 59 inches—very pale brown sand

Subsoil:

59 to 73 inches—brownish yellow fine loamy sand that has pockets of white sand

73 to 80 inches—pale brown fine sandy loam that has pockets of white sand and a few strong brown plinthite nodules

Soil Properties and Qualities

Drainage class: Albany—somewhat poorly drained; Blanton—moderately well drained

Permeability: Albany—moderate; Blanton—moderate or moderately slow

Available water capacity: Low

Seasonal high water table: Albany—apparent, at a depth of 12 to 42 inches from January through March and from July through September; Blanton—apparent, at a depth of 48 to 66 inches from January through March and from July through September

Flooding: None

Shrink-swell potential: Low

Content of organic matter in the surface layer: Low

Natural fertility: Low

Other distinctive properties: None

Minor Components

Dissimilar soils:

- Well drained Dothan and Fuquay soils in the slightly higher positions

Similar soils:

- Moderately well drained Goldsboro soils, which have a loamy layer within a depth of 20 inches
- Moderately well drained Stilson soils, which contain 5 to 32 percent, by volume, plinthite in the loamy subsoil

Land Use

Dominant uses: Forestland

Other uses: Wildlife habitat and cropland

Interpretive Groups

Land capability classification: Albany—3e; Blanton—3s

Ecological community: Mixed Hardwood and Pine

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; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel and sand. 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

In 2002, about 9,900 acres in Liberty County was used for crops and pasture (USDA–NASS, 2002). Of this, about 8,700 acres was pasture and 1,200 acres was cropland. Of the cropland, only about 220 acres was harvested. The acreage used for crops and pasture has declined since the early 1980s because of economic conditions.

The potential of the soils in Liberty County to support increased food production is good. In addition to the reserve capacity represented by soils now used as forestland and pasture, extending the latest crop production technology to all of the cropland in the county could increase food production. This soil survey can help in the application of such technology.

Erosion caused by water is a hazard on cropland where the slope is more than 5 percent, especially in areas of the well drained and moderately well drained Blanton, Dothan, Fuquay, Lucy, and Troup soils.

Erosion can reduce productivity and can result in pollution of streams. Productivity is reduced as the surface layer erodes and more of the subsoil is incorporated into the plow layer. Erosion on farmland results in sediment entering streams. Controlling this erosion minimizes the pollution of streams and improves the quality of water for municipal uses, for recreational uses, and for fish and wildlife.

Erosion-control practices provide a protective surface cover, increase the rate of water infiltration, and help to control runoff. A cropping system that keeps plant cover on the soil for extended periods can hold soil losses to amounts that do not reduce the productive capacity of the soils.

Minimizing tillage and leaving crop residue on the surface increase the rate of water infiltration and help to control runoff and erosion. Using a no-till system helps to control erosion in sloping areas. These practices can be adapted to most of the soils in the survey area.

Terraces, diversions, and stripcropping help to control runoff and erosion by reducing the length of slope. These practices are most practical on deep, well drained soils that have a regular slope. Diversions and sod waterways, which also help to control runoff and erosion, can be used on most of the soils in the county. Contour farming also helps to control erosion. It is most suited to soils that have smooth, uniform slopes.

Erosion caused by wind is currently not a significant problem in Liberty County. The cropland in the county is intermixed with areas of forestland. This mixture precludes the large distances of unsheltered cropland that are associated with wind erosion. Wind erosion can be a hazard where the soils are exposed and have a sandy surface layer or a surface layer of loamy sand. Strong winds can damage soils and tender crops in a few hours in open, unprotected areas where the surface is dry and bare. Maintaining a plant cover and surface mulch minimize wind erosion.

Information regarding the design of erosion-control practices for each kind of soil is contained in "Water and Wind Erosion Control Handbook—Florida," which is available at the local office of the Natural Resources Conservation Service.

Drainage is not a major management concern on the acreage currently used for crops and pasture in Liberty County. Soils that are poorly drained or very poorly drained are not normally used for crops and pasture.

Fertility is naturally low in most of the soils in the county. Most of the soils have a surface layer of sand or loamy sand. Many of the soils have a loamy subsoil.

Examples are Albany, Blanton, Dothan, Fuquay, Garcon, Leefield, Lucy, Stilson, and Troup soils. Chipley, Foxworth, and Lakeland soils have sandy material to a depth of 80 inches or more. Hurricane and Pottsburg soils have an organic-stained subsoil (hardpan).

Most of the soils in the county have a surface layer that is strongly acid or very strongly acid and require applications of lime to raise the pH sufficiently for good growth of crops. Nitrogen, potassium, and phosphate levels are naturally low in most of these soils.

On all soils, applications of lime and fertilizer should be based on the results of soil tests, on the needs of crops, and on the expected level of yields. The Cooperative Extension Service can help in determining the kinds and amounts of fertilizer and lime to apply.

Tilth is an important factor affecting the germination of seeds and the infiltration of water into the soil. Soils that have good tilth are granular and porous.

Most of the soils that are used for crops and pasture in the county have a low or moderate content of organic matter. Generally, the structure of the surface layer of these soils is weak. Soils that have a low content of organic matter form a slight crust following intense rainfall. The crust is slightly hard when dry and is impervious to water. It reduces infiltration and increases runoff. The increased runoff causes erosion. Regular additions of crop residue, manure, and other organic material improve structure and minimize crusting.

Pastures in the county are mostly used to produce forage for beef cattle. Beef cattle cow-calf operations are the major cattle systems. Bahiagrass and coastal bermudagrass are the major pasture plants. In many of the pastures, excess grass is harvested as hay during the summer for use as feed during the winter.

The well drained and moderately well drained Dothan, Fuquay, Lucy, and Stilson soils are well suited to bahiagrass, alfalfa, and improved bahiagrass. The somewhat poorly drained Albany, Chipley, Garcon, Hurricane, and Leefield soils are well suited to bahiagrass and improved bermudagrass if legumes, such as white, crimson, and arrowleaf clover, are also grown and if adequate amounts of lime and fertilizer are applied.

Many of the pastures in the county are greatly depleted by continuous excessive grazing. Pasture yields can be increased by properly applying lime and fertilizer, growing legumes, installing drainage, irrigating, and using other management practices.

Differences in pasture yields are closely related to differences in soils. Proper management of pasture is based on the interrelationship of soils, pasture plants, lime, fertilizer, and moisture.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of each map unit also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop

residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 5 may be 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, and for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by 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 few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are not likely to erode but have other limitations, impractical to remove, that limit their use.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation.

Class 7 soils have very severe limitations that make them unsuitable for cultivation.

Class 8 soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, or *s*, to the class numeral, for example, 2*e*. 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); and *s* shows that the soil is limited mainly because it is shallow, droughty, or stony.

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* or *s* because the

soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

The capability classification of each map unit is given in the section "Detailed Soil Map Units" and in table 5.

Ecological Communities

In areas that have similar climate and topography, differences between the kinds and amounts of vegetation in the areas are closely related to differences between the kinds of soils in the areas. An *ecological community* is the product of all the environmental factors responsible for its development. It has characteristic soils; a characteristic hydrology, particularly infiltration and runoff; and a characteristic plant community. The vegetation, soils, and hydrology are all interrelated. Descriptions of ecological communities are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

The relationship between soils and vegetation was ascertained during this survey; thus, ecological communities generally can be determined directly from the soil map. Soil properties that affect moisture supply and plant nutrients have the greatest influence on the productivity of plants. Soil reaction and a seasonal high water table are also important.

The ecological community concept is based on the knowledge that a soil type commonly supports a specific vegetative community, which in turn provides the habitat needed by specific wildlife species. Vegetative communities form recognizable units on the landscape, most of which are apparent to the casual observer after only a little training. Even without prior botanical training, an observer can quickly learn to distinguish between North Florida Flatwoods and Longleaf Pine-Turkey Oak Hills or between Slough and Swamp Hardwoods. Once a community is recognized, information can be found concerning the general characteristics of the soil on which it occurs and the types of plants and animals it supports.

Although some plants are found only within a very narrow range of conditions, many plants can survive throughout a wide range of conditions. Individual plants that have a wide tolerance level can occur in many different communities and on a variety of soils. When describing ecological communities, plant scientists study the patterns in which vegetation occurs. They study what species occur, the relative abundance of each species, the stage of plant succession, the dominance of species, the position of species on the landscape, and the soil or soils on which the patterns occur. Recognizable patterns of vegetation are typically found in a small group of soil types that have common characteristics.

During many years of field observations while conducting soil surveys, the Natural Resources Conservation Service determined which vegetative communities commonly occur on the different soils throughout Florida. This information is summarized in the booklet "26 Ecological Communities of Florida" (USDA-SCS, 1989). Some of the terms used to describe these communities are specific to Florida.

In the following paragraphs, the vegetative community on individual map units during the climax state of plant succession is described. The community described is based on relatively natural conditions. Human activities, such as logging and fire suppression, can alter the community on a specific site.

Longleaf Pine-Turkey Oak Hills

The Longleaf Pine-Turkey Oak Hills ecological community is typically on nearly level to gently sloping uplands. There are several variations of this community. Mature, natural stands of trees that have not been logged have an overstory of scattered longleaf pine. Areas from which the pines have been removed are dominated by turkey oak and other oaks, have little ground cover, and have

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numerous, noticeable bare areas. This ecological community supports wildlife species that are adapted to stress caused by high temperatures and drought. Many of the animals are burrowers. Burrowing helps to prevent water loss and provides protection against high temperatures. The most common animals are fox squirrel, pocket gopher, turkey, white-tailed deer, bobwhite quail, ground dove, gopher tortoise, and many songbirds, including warblers, towhees, and crested flycatchers. This ecological community is used to some extent for timber production. Sand pine is commonly planted because it is better adapted to these sites than slash pine. Recent advancements in nursery stock of longleaf pine have reduced the amount of time seedlings remain in the "grass stage." The map units that support the Longleaf Pine-Turkey Oak Hills ecological community in Liberty County are:

- 4 Alpin-Foxworth complex, 5 to 12 percent slopes
- 9 Centenary sand, 0 to 5 percent slopes
- 11 Chipley-Foxworth complex, 0 to 5 percent slopes
- 26 Foxworth sand, 0 to 5 percent slopes
- 34 Lakeland sand, 0 to 5 percent slopes
- 35 Lakeland sand, 5 to 8 percent slopes
- 36 Lakeland sand, 8 to 15 percent slopes
- 37 Lakeland-Foxworth complex, 15 to 30 percent slopes
- 69 Troup sand, 0 to 5 percent slopes
- 70 Troup sand, 5 to 8 percent slopes
- 72 Lakeland sand, 30 to 85 percent slopes
- 73 Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes (in areas of the Foxworth and Lucy soils)
- 96 Foxworth-Lakeland complex, 0 to 5 percent slopes
- 97 Foxworth-Lakeland complex, 5 to 15 percent slopes

Mixed Hardwood and Pine

The Mixed Hardwood and Pine ecological community is typically on rolling uplands. Water movement is gradual to natural drainageways. This ecological community can be easily identified by the mixed hardwood and pine vegetation in predominantly better drained areas. The type and amount of vegetation vary depending on the successional stage. In the early stages, shortleaf pine and loblolly pine dominate. As the system matures, hardwoods replace the pines. This ecological community supports deer, turkey, squirrel, raccoon, opossum, bobwhite quail, dove, and many songbirds. Hardwood mast (acorns, nuts, fruits, buds, and berries) furnish a good source of food for wildlife. The map units that support the Mixed Hardwood and Pine ecological community in Liberty County are:

- 2 Albany sand, 0 to 5 percent slopes
- 6 Blanton sand, 0 to 5 percent slopes
- 7 Blanton sand, 5 to 8 percent slopes
- 14 Dothan loamy sand, 0 to 2 percent slopes
- 15 Dothan loamy sand, 2 to 5 percent slopes
- 17 Dothan-Fuquay complex, 8 to 12 percent slopes
- 24 Goldsboro loamy sand, 0 to 2 percent slopes
- 25 Goldsboro loamy sand, 2 to 5 percent slopes
- 27 Fuquay loamy sand, 0 to 5 percent slopes
- 31 Hurricane and Chipley soils, 0 to 3 percent slopes
- 38 Leefield loamy sand, 0 to 5 percent slopes
- 42 Lucy sand, 0 to 5 percent slopes
- 44 Lynchburg loamy sand
- 46 Hurricane, Leon, and Albany soils (in areas of the Hurricane and Albany soils)
- 63 Stilson fine sand, 0 to 3 percent slopes
- 75 Brantley-Okeelala-Lucy complex, 8 to 45 percent slopes

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- 78 Lucy-Blanton-Cowarts complex, 8 to 45 percent slopes
- 98 Leon-Chipley complex (in areas of the Chipley soil)
- 101 Albany-Blanton complex, 0 to 5 percent slopes

North Florida Flatwoods

The North Florida Flatwoods ecological community is in nearly level areas. Water movement is very gradual to natural drainageways, swamps, ponds, and marshes. Wet conditions prevail during the rainy season when the water table is on or near the surface. This ecological community is easily identified by the flat topography, slash pine, and dense saw palmetto vegetation. This ecological community supports a diverse and numerous population of wildlife, including deer, quail, turkey, squirrels, bobcat, skunks, opossums, raccoons, and many songbirds, particularly warblers. The map units that support the North Florida Flatwoods ecological community in Liberty County are:

- 32 Plummer and Pelham soils
- 39 Leon sand
- 45 Lynn Haven sand
- 46 Hurricane, Leon, and Albany soils (in areas of the Leon soil)
- 48 Meadowbrook sand
- 54 Pelham loamy sand
- 55 Plummer sand, 0 to 5 percent slopes
- 56 Pottsburg sand
- 60 Sapelo sand
- 61 Osier sand
- 67 Goldhead sand
- 81 Scranton fine sand
- 83 Plummer, Sapelo, and Pottsburg soils
- 91 Woodington loamy sand
- 98 Leon-Chipley complex (in areas of the Leon soil)

Bottomland Hardwoods

The Bottomland Hardwoods ecological community is on flood plains along rivers. The Bottomland Hardwood ecological community is distinguished from the Swamp Hardwoods ecological community by rapid rising and falling of floodwater and by limited inundation during the growing season. Vegetation is extremely diverse in the Bottomland Hardwood ecological community. Shrubs, vines, grasses, and herbaceous plants grow profusely where sunlight penetrates the canopy. As the forest matures and competition for sunlight increases during the growing season, areas of this ecological community take on an open, park-like appearance. Trees that characterize this ecological community are American elm, American hornbeam, and black willow. This ecological community supports a diverse population of wildlife, including bobcat, deer, flying squirrel, gray fox, rabbit, gray squirrel, mink, opossum, otter, raccoon, hawks, owls, songbirds, turkey, woodpeckers, alligator, canebrake, and water moccasin. Probably the most important role of this ecological community as a natural system is that of receiving, assimilating, and redistributing floodwaters, sediments, pollutants, and nutrients. The map units that support the Bottomland Hardwoods ecological community in Liberty County are:

- 8 Brickyard clay loam, frequently flooded
- 30 Elloree, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded
- 47 Torhunta-Lynn Haven-Croatan complex, frequently flooded
- 66 Wahee and Ochlocknee soils, 0 to 3 percent slopes, occasionally flooded
- 74 Garcon, Ochlocknee, and Ousley soils, occasionally flooded
- 82 Brickyard and Chowan soils, frequently flooded
- 95 Bibb, Rains, and Garcon soils, occasionally flooded

Swamp Hardwoods

The Swamp Hardwoods ecological community borders rivers and is in basins that are either submerged or saturated part of the year. This ecological community is typically characterized by hardwoods, a high percentage of which are deciduous. Common dominant trees are red maple, elm, black gum, water tupelo, and cypress. This ecological community supports wildlife that are adapted to wet conditions and can endure periodic flooding. These include black bear, bobcat, deer, turkey, gray squirrel, mink, otter, raccoon, hawks, owls, pileated woodpecker, wood duck, songbirds, turtles, snakes, and alligators. The map units that support the Swamp Hardwoods ecological community in Liberty County are:

- 12 Rutlege and Plummer soils, depressional
- 13 Dorovan-Pamlico complex, depressional
- 57 Surrency, Pantego, and Croatan soils, depressional
- 58 Rutlege, Bibb, and Surrency soils, frequently flooded
- 65 Pickney, Dorovan, and Bibb soils, frequently flooded
- 68 Goldhead-Meadowbrook complex, depressional
- 92 Pamlico-Pickney complex, frequently flooded

Wetland Hardwood Hammocks

The Wetland Hardwood Hammocks ecological community is a wetland forest that is subject to constant seepage. It has an evergreen appearance because it is dominated by laurel oak, water oak, loblolly bay, loblolly pine, longleaf pine, red maple, slash pine, southern magnolia, red cedar, swamp chestnut oak, and sweet gum. It has an understory of American beautyberry, shining sumac, yaupon holly, saw palmetto, and wax myrtle. This ecological community provides good habitat for wild hogs, deer, turkey, black bear, gray squirrel, woodpeckers, owls, and songbirds. The map units that supports the Wetland Hardwood Hammocks ecological community in Liberty County are:

- 59 Hosford mucky coarse sand, 2 to 8 percent slopes
- 73 Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes (in areas of the Hosford soil)

Slough

The Slough ecological community is an open expanse of grasses and sedges in areas where the soils are saturated during the rainy season. Most sloughs are relatively long and narrow and are slightly lower in elevation than the surrounding flatwoods. Sloughs serve as natural drainageways during periods of high water. As such, they have great value in improving water quality by natural processes. This ecological community supports a diverse wildlife population, especially where the sloughs join flatwoods and hammock areas. Typical wildlife species include deer, gray fox, marsh rabbit, opossum, raccoon, and bobwhite quail. The map units that support the Slough ecological community in Liberty County are:

- 5 Rains and Bladen soils
- 49 Meadowbrook sand, slough
- 62 Scranton loamy sand, slough

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forest land, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. The slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

The map units in the survey area that are considered prime farmland are listed at the end of this section. This list does not constitute a recommendation for a particular land use. On one soil included in the list, measures that overcome wetness are needed. Onsite evaluation is needed to determine whether or not the wetness has been overcome by corrective measures. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps.

The map units that meet the requirements for prime farmland in Liberty County are:

- 14 Dothan loamy sand, 0 to 2 percent slopes
- 15 Dothan loamy sand, 2 to 5 percent slopes
- 24 Goldsboro loamy sand, 0 to 2 percent slopes
- 25 Goldsboro loamy sand, 2 0 to 5 percent slopes
- 44 Lynchburg loamy sand (where drained)

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Table 6 shows the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it has a high content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly has a very low content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

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The ratings in the table are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste and application of sewage sludge).

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 agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are generally favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the 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 (1.00) and the point at which the soil feature is not a limitation (0.00).

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

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

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

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

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

Forestland Productivity and Management

Forestland comprises about 515,000 acres, or about 96 percent, of Liberty County. About 50 percent of this acreage is in the Apalachicola National Forest. The majority of the remaining forestland is owned by private interests and the State of Florida.

Slash pine, either native or planted, is the main tree species grown commercially in the county. It is especially common in the areas of flats and knolls, which are the dominant landforms in the county. Soils that typically support slash pine are Bladen, Hurricane, Leon, Lynn Haven, Osier, Pelham, Plummer, Pottsburg, Sapelo, and Scranton soils. These soils are throughout the county, except for the northern part, which is better drained. Sand pine, longleaf pine, and loblolly pine are the other main tree species grown commercially in the county.

Sand pine grows in the northern part of the county adjacent to State Road 20, typically in plantations. Sand pine requires relatively sandy, dry sites for optimum survival and growth. The major soils that support sand pine are Alpin, Foxworth, Lakeland, and Troup soils.

Loblolly pine is planted on soils that have a loamy subsoil that is relatively close to the surface and that are somewhat poorly drained to well drained. The major soils that support loblolly pine are Dothan, Fuquay, Goldsboro, Leefield, Lucy, Lynchburg, and Stilson soils. Most areas of loblolly pine in the county are on uplands adjacent to the Apalachicola River.

The river bottoms and flood plains along the Apalachicola and Ochlockonee rivers and Telogia creek support bottomland hardwoods and slash pine. The hardwood species include cypress, hickory, sweetgum, sycamore, tupelo, and various oaks. The common soils in these areas are Brickyard, Ochlockonee, Pickney, Rutlege, Surrency, and Wahee soils.

Timber management in Liberty County includes clearcutting, bedding, planting, and selective cutting and thinning. Prescribed burning on pine plantations can reduce plant competition and exposes mineral soils as a bed for young pine seedlings. Burning also encourages the growth of grasses and forbs that help to support various wildlife species, such as deer, quail, and turkey.

The tables associated with 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.

More detailed information on forestland and forestland management can be obtained from local consulting foresters, the Florida Division of Forestry, and the Natural Resources Conservation Service.

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 forestland 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 (<http://soils.usda.gov/>).

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 and 8b, 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 forestland management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately well suited* indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the 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 specified forest management practice (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for 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 seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for forestland management practices. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet (<http://soils.usda.gov/>).

Table 8a

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, 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.

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

Ratings in the column *hazard of 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* 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 well suited, or poorly suited to this use.

Table 8b

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

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

Ratings in the column *potential for 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.

Recreation

The soils of the survey area are rated in tables 9a and 9b 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, 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 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.

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 are also considerations. Examples of grain and seed crops are corn, wheat, and millet.

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

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

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, cherry, cabbage palm, sweetgum, dogwood, and hickory. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are wild grape, blackberry, and blueberry.

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, cedar, and cypress.

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 rice, pickerelweed, cattail, arrowhead, rushes, and sedges.

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, sloughs, 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 deer, bobwhite quail, field sparrow, cottontail, and red fox.

Habitat for forestland wildlife consists of areas of deciduous plants or coniferous plants or both and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include turkey, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, deer, bear, and wild hog.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, egrets, herons, shore birds, alligator, mink, and beaver.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

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 each of

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the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or 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, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999), "Keys to Soil Taxonomy" (Soil Survey Staff, 1998), and the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1998).

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. Table 11 lists the map unit components that are rated as hydric and indicates the hydric criteria for each such component.

The following map units meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. 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, 1998).

- 8 Brickyard clay loam, 0 to 2 percent slopes, frequently flooded
- 12 Rutlege and Plummer soils, depressional
- 13 Dorovan-Pamlico complex, depressional
- 47 Torhunta-Lynn Haven-Croatan complex, frequently flooded
- 49 Meadowbrook sand, slough
- 57 Surrency, Pantego, and Croatan soils, 0 to 1 percent slopes, depressional
- 58 Rutlege, Bibb, and Surrency soils, frequently flooded
- 59 Hosford mucky coarse sand, 2 to 8 percent slopes
- 62 Scranton loamy sand, slough
- 65 Pickney, Dorovan, and Bibb soils, frequently flooded
- 68 Goldhead-Meadowbrook complex, depressional
- 82 Brickyard and Chowan soils, frequently flooded
- 92 Pamlico-Pickney complex, frequently flooded

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of

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nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The following map units, in general, do not meet the definition of hydric soils. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

- 5 Rains and Bladen soils
- 30 Elloree, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded
- 32 Plummer and Pelham soils
- 45 Lynn Haven sand
- 48 Meadowbrook sand
- 54 Pelham loamy sand
- 55 Plummer sand, 0 to 5 percent slopes
- 73 Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes
- 95 Bibb, Rains, and Garcon soils, occasionally flooded

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the "Soil Properties" section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil within a depth of 5 or 6 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

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

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

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 or 6 feet of the surface, soil wetness, depth to a seasonal high water table, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for

soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

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

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

Building Site Development

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

Table 14 gives information about the soils as potential sources of gravel and sand. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not

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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.

Soil Properties

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps.

Estimates of soil properties are based on field examinations 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 Properties

Table 15 gives the engineering classifications and the range of 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, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches 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 oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Soil Properties

Table 16 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.

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 (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $1/3$ - or $1/10$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots.

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Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (Ksat) 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 inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 16, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 16 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 as follows:

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1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.
- 4L. Calcareous loams, silt loams, clay loams, and silty clay loams.
4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

Table 17 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the

table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

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

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

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. Table 18 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 19 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

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.

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

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

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udult (*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 Paleudults (*Pale*, meaning thick 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 *Grossarenic* identifies the subgroup that has an argillic horizon at a depth of 100 centimeters or more below the soil surface. An example is Grossarenic Paleudults.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is loamy, siliceous, semiactive, thermic Grossarenic Paleudults.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is the Blanton series.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each

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series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units of each soil series are described in the section "Detailed Soil Map Units."

Albany Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Moderate or moderately slow

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Knolls and rises

Slope: 0 to 5 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Aquic Arenic Paleudults

The Albany soils are commonly associated on the landscape with Blanton, Dothan, Fuquay, Goldsboro, and Stilson soils. The associated soils are in the higher positions. The Dothan and Fuquay soils are well drained. The Blanton, Goldsboro, and Stilson soils are moderately well drained.

Typical Pedon

Albany sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 16 minutes 40 seconds N. and long. 84 degrees 58 minutes 50 seconds W.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) sand; weak fine granular structure; very friable; very strongly acid; clear smooth boundary.

E1—6 to 22 inches; pale brown (10YR 6/3) sand; single grained; loose; strongly acid; gradual smooth boundary.

E2—22 to 31 inches; light yellowish brown (10YR 6/4) sand; single grained; loose; many fine prominent reddish yellow (5YR 6/8) masses of iron accumulation and many medium distinct light gray (10YR 7/2) areas of iron depletion; very strongly acid; clear wavy boundary.

Eg—31 to 47 inches; light gray (10YR 7/1) sand; single grained; loose; common fine prominent reddish yellow (5YR 6/8), common medium distinct light yellowish brown (10YR 6/4), and few medium prominent brownish yellow (10YR 6/6) masses of iron accumulation; strongly acid; clear wavy boundary.

Btg1—47 to 67 inches; light gray (10YR 7/2) fine sandy loam; moderate coarse subangular blocky structure; friable; common large prominent brownish yellow (10YR 6/6) and common fine prominent reddish yellow (7.5YR 6/8) masses of iron accumulation; strongly acid; clear wavy boundary.

Btg2—67 to 80 inches; light gray (10YR 7/2) fine sandy loam; moderate coarse subangular blocky structure; friable; common large prominent brownish yellow (10YR 6/6), common fine prominent reddish yellow (7.5YR 6/8), and common fine and medium prominent red (10R 4/8) masses of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

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Reaction: Extremely acid to moderately acid throughout, except 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—sand, fine sand, or loamy fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 3 to 7
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and areas of iron depletion in shades of gray

Eg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Bt horizon (where present):

Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and areas of iron depletion in shades of gray

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Alpin Series

Depth class: Very deep

Drainage class: Excessively drained

Permeability: Rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges and hillslopes

Slope: 5 to 12 percent

Taxonomic class: Thermic, coated Lamellic Quartzipsamments

The Alpin soils are commonly associated on the landscape with Centenary, Chipley, Foxworth, Lakeland, and Troup soils. The Centenary, Chipley, and Foxworth soils are in the lower positions, are more poorly drained than the Alpin soils, and do not have lamellae. The Lakeland soils are in positions similar to those of the Alpin soils and do not have lamellae. The Troup soils are in the lower positions, have a Bt horizon, and do not have lamellae.

Typical Pedon

Alpin sand, in an area of Alpin-Foxworth complex, 5 to 12 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 33 degrees 22 minutes 33 seconds N. and long. 84 degrees 54 minutes 48 seconds W.

Ap—0 to 10 inches; brown (10YR 4/3) sand; weak fine granular structure; very friable; strongly acid; abrupt smooth boundary.

E1—10 to 25 inches; brownish yellow (10YR 6/6) sand; single grained; loose; strongly acid; gradual wavy boundary.

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E2—25 to 45 inches; yellow (10YR 7/6) sand; single grained; loose; strongly acid; clear wavy boundary.

E&Bt—45 to 80 inches; light gray (10YR 7/2) sand (E); single grained; loose; few strong brown (7.5YR 5/8) loamy sand lamellae (Bt) about 5 millimeters thick; sand grains in lamellae are coated; individual lamellae are discontinuous in length; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Very strongly acid to slightly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 3

Texture—sand or fine sand

E horizon:

Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 3 to 8; the small areas of uncoated sand grains that occur in some pedons are not related to wetness.

Texture—sand or fine sand

Texture of fine-earth plus silt fraction—5 to 10 percent in the 10- to 40-inch control section

E part of the E&Bt horizon:

Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 3 to 8; the small areas of uncoated sand grains that occur in some pedons are not related to wetness.

Texture—sand or fine sand

Bt part (lamellae) of the E&Bt horizon:

Color—hue of 5YR to 10YR, value of 5 to 7, and chroma of 4 to 8

Size—1 to 16 millimeters in thickness and 2 centimeters to more than 1 meter in horizontal length

Texture—loamy sand, loamy fine sand, fine sandy loam, or sandy loam

C horizon (where present):

Color—hue of 10YR, value of 6 or 7, and chroma of 1 to 6

Texture—sand or fine sand

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

Slope: 0 to 2 percent

Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents

The Bibb soils are commonly associated on the landscape with Elloree, Meggett, and Rutlege soils. The Elloree and Meggett soils are in positions similar to those of the Bibb soils and have a Bt horizon. The Rutlege soils are in the lower positions and are very poorly drained.

Typical Pedon

Bibb fine sandy loam, in an area of Ellore, Bibb and Meggett soils, 0 to 3 percent slopes, frequently flooded; in Liberty County, Florida; USGS Ward topographic quadrangle; lat. 30 degrees 17 minutes 56 seconds N. and long. 84 degrees 43 minutes 33 seconds W.

- A—0 to 5 inches; very dark gray (10YR 3/1) fine sandy loam; weak fine granular structure; very friable; few fine roots; strongly acid; clear smooth boundary.
- Ag—5 to 15 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; very friable; few fine roots; strongly acid; clear wavy boundary.
- Cg1—15 to 26 inches; gray (10YR 5/1) sandy loam; massive; friable; strongly acid; gradual wavy boundary.
- Cg2—26 to 45 inches; gray (10YR 5/1) sandy loam; massive; friable; few fine prominent reddish yellow (7.5YR 6/8) areas of iron accumulation; strongly acid; gradual wavy boundary.
- Cg3—45 to 80 inches; gray (10YR 6/1) loamy sand; massive; very friable; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Reaction: Extremely acid to strongly acid throughout

A or Ap horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 3

Texture—sand, loamy sand, sandy loam, fine sandy loam, or loamy fine sand

Ag horizon (where present):

Color—hue of 10YR or 2.5Y, value of 3 to 7, and chroma of 1 or 2

Texture—sand, loamy sand, sandy loam, fine sandy loam, or loamy fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Cg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—dominantly sandy loam, fine sandy loam, loam, silt loam, or stratified with these textures; sand, loamy sand, or loamy fine sand in the lower part of the horizon in some pedons

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Bladen Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Slow

Parent material: Clayey marine sediments

Landscape: Coastal Plain

Landform: Flats

Slope: 0 to 2 percent

Taxonomic class: Fine, mixed, semiactive, thermic Typic Albaquults

The Bladen soils are commonly associated on the landscape with Leefield, Lynchburg, Rains, and Woodington soils. The Leefield and Lynchburg soils are in the higher positions and are somewhat poorly drained. The Rains and Woodington soils are in positions similar to those of the Bladen soils. The Rains soils have 18 to 35

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percent clay in the control section. The Woodington soils have less than 18 percent clay in the control section.

Typical Pedon

Bladen fine sandy loam, in an area of Rains and Bladen soils; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 3 minutes 36 seconds N. and long. 85 degrees 1 minute 51 seconds W.

- A—0 to 5 inches; black (10YR 2/1) fine sandy loam; weak fine granular structure; very friable; many fine roots; very strongly acid; clear smooth boundary.
- E—5 to 14 inches; grayish brown (2.5Y 5/2) fine sandy loam; weak fine granular structure; very friable; many fine roots; very strongly acid; gradual smooth boundary.
- Btg1—14 to 40 inches; dark gray (N 4/0) clay; strong medium subangular blocky structure; very firm; few fine roots; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; extremely acid; gradual wavy boundary.
- Btg2—40 to 65 inches; gray (N 5/0) clay; strong medium subangular blocky structure; very firm; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; extremely acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, or loam

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, or loam

Redoximorphic features (where present)—few iron accumulations in shades of brown or yellow or iron depletions in shades of gray

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or neutral in hue and value of 4 to 7

Texture—clay, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

BCg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2; or neutral in hue and value of 4 to 7

Texture—clay, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2; or neutral in hue and value of 4 to 7

Texture—stratified or variable sandy to clayey materials

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow

Blanton Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Moderate or moderately slow

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Hills, knolls, and hillslopes

Slope: 0 to 8 percent

Taxonomic class: Loamy, siliceous, semiactive, thermic Grossarenic Paleudults

The Blanton soils are commonly associated on the landscape with Albany, Cowarts, Dothan, Fuquay, Goldsboro and Stilson soils. The Albany soils are in the lower positions and are somewhat poorly drained. The Cowarts, Dothan, Fuquay, Goldsboro, and Stilson soils are in positions similar to those of the Blanton soils. The Cowarts, Dothan, and Goldsboro soils have a Bt horizon at a depth of less than 20 inches. The Fuquay and Stilson soils have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Blanton sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bloxham topographic quadrangle; lat. 30 degrees 23 minutes 12 seconds N. and long. 84 degrees 43 minutes 26 seconds W.

Ap—0 to 8 inches; light brownish gray (10YR 6/2) sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

E1—8 to 43 inches; light yellowish brown (10YR 6/4) sand; single grained; loose; strongly acid; gradual wavy boundary.

E2—43 to 59 inches; very pale brown (10YR 8/2) sand; single grained; loose; moderately acid; abrupt smooth boundary.

Bt1—59 to 73 inches; brownish yellow (10YR 6/8) loamy sand; weak medium subangular blocky structure; very friable; many large prominent pockets of white (10YR 8/1) iron depletions; moderately acid; clear smooth boundary.

Bt2—73 to 80 inches; pale brown (10YR 6/3) fine sandy loam; weak medium subangular blocky structure; very friable; few fine distinct white (10YR 8/1) iron depletions and few medium prominent strong brown (7.5YR 4/6) plinthite nodules; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

Reaction: Very strongly acid to moderately acid throughout, except 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 to 3

Texture—sand, fine sand, or loamy fine sand

E horizon:

Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 1 to 6; areas of clean sand grains in some pedons

Texture—sand or fine sand

Bt horizon:

Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8

Texture—loamy sand, loamy fine sand, sandy loam, fine sandy loam, or sandy clay loam

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Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray or white; less than 5 percent plinthite within a depth of 60 inches, 0 to 12 percent plinthite below a depth of 60 inches

Btg horizon (where present):

Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray or white; 0 to 12 percent plinthite below a depth of 60 inches

Brantley Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Slow

Parent material: Loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges and hillslopes

Slope: 8 to 35 percent

Taxonomic class: Fine, mixed, active, thermic Ultic Hapludalfs

The Brantley soils are commonly associated on the landscape with Lucy and Okeelala soils. The Lucy soils are in the slightly higher positions and have a Bt horizon at a depth of 20 to 40 inches. The Okeelala soils are in positions similar to those of the Brantley soils and have 18 to 35 percent clay in the control section.

Typical Pedon

Brantley fine sandy loam, in an area of Brantley-Okeelala-Lucy complex, 8 to 45 percent slopes; in Liberty County, Florida; USGS Rock Bluff topographic quadrangle; lat. 30 degrees 34 minutes 8 seconds N. and long. 84 degrees 56 minutes 21 seconds W.

A—0 to 6 inches; brown (10YR 4/3) fine sandy loam; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

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

Bt1—11 to 35 inches; yellowish red (5YR 5/6) clay; strong medium subangular blocky structure; firm; strongly acid; gradual wavy boundary.

Bt2—35 to 43 inches; yellowish red (5YR 5/6) clay loam; weak medium subangular blocky structure; friable; few medium faint yellowish brown (10YR 5/6) areas of iron accumulation; strongly acid; gradual wavy boundary.

Bt3—43 to 57 inches; strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; few medium faint yellowish brown (10YR 5/6) and yellowish red (5YR 5/6) areas of iron accumulation; strongly acid; gradual wavy boundary.

C—57 to 80 inches; yellowish brown (10YR 5/6) sandy loam; weak coarse subangular blocky structure; friable; few medium faint strong brown (7.5YR 5/6) and yellowish red (5YR 5/6) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid to slightly acid in the surface layers and very strongly acid or strongly acid in the subsoil

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A or Ap horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—fine sandy loam or loam

E horizon (where present):

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—fine sandy loam or loam

Bt horizon (upper part):

Color—hue of 2.5YR to 10YR, value of 4 or 5, and chroma of 4 to 8

Texture—clay loam or clay

Bt horizon (lower part):

Color—hue of 5YR to 10YR, value of 4 or 5, and chroma of 3 to 8

Texture—clay loam or sandy clay loam

Redoximorphic features—few or common iron accumulations in shades of brown, red, or yellow

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8; or multicolored in shades of brown, red, yellow, or gray

Texture—loamy fine sand, sandy clay loam, or sandy loam

Redoximorphic features—few or common iron accumulations in shades of brown, red, or yellow

Brickyard Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Very slow

Parent material: Clayey alluvium

Landscape: Coastal Plain

Landform: Flood plains

Slope: 0 to 2 percent

Taxonomic class: Fine, smectitic, nonacid, thermic Typic Endoaquepts

The Brickyard soils are commonly associated on the landscape with Chowan, Garcon, Ochlockonee, Ousley, and Wahee soils. The associated soils are in the higher positions. The Chowan soils are poorly drained and have a buried layer of muck. The Garcon, Ousley, and Wahee soils are somewhat poorly drained. The Ochlockonee soils are on well drained stream terraces.

Typical Pedon

Brickyard clay loam, frequently flooded; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 7 minutes 22 seconds N. and long. 85 degrees 5 minutes 40 seconds W.

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

Cg1—4 to 8 inches; grayish brown (10YR 5/2) clay; massive; firm, sticky and plastic; common fine and medium roots; moderately acid; gradual wavy boundary.

Cg2—8 to 50 inches; light gray (10YR 6/1) clay; massive; firm, sticky and plastic; moderately acid; clear wavy boundary.

Cg3—50 to 80 inches; bluish gray (5B 6/1) clay; massive; firm, sticky and plastic; moderately acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Reaction: Moderately acid to neutral in the A horizon and moderately acid to moderately alkaline in the Cg horizon

A horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4

Texture—silty clay loam, silt loam, silty clay, clay loam, or clay

Cg horizon:

Color—hue of 10YR to 5B, value of 3 to 7, and chroma of 1 or 2

Texture—silty clay loam, silt loam, silty clay, clay loam, or clay; ranging from loamy sand to sandy clay below a depth of 60 inches in some pedons

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Centenary Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Moderately rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain uplands

Landform: Knolls and rises

Slope: 0 to 5 percent

Taxonomic class: Sandy, siliceous, thermic Entic Grossarenic Alorthods

The Centenary soils are commonly associated on the landscape with Chipley, Foxworth, Lakeland, and Troup soils. The Chipley soils are in the lower positions, are somewhat poorly drained, and do not have a Bh horizon. The Foxworth soils are in positions similar to those of the Centenary soils and do not have a Bh horizon. The Lakeland soils are in the higher positions, are excessively drained, and do not have a Bh horizon. The Troup soils are in the slightly higher positions, are somewhat excessively drained, and have a Bt horizon below a depth of 40 inches.

Typical Pedon

Centenary sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Hosford topographic quadrangle; lat. 30 degrees 28 minutes 15 seconds N. and long. 84 degrees 49 minutes 38 seconds W.

A—0 to 5 inches; very dark grayish brown (10YR 3/2) sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

E1—5 to 16 inches; brownish yellow (10YR 6/6) sand; single grained; loose; strongly acid; clear smooth boundary.

E2—16 to 53 inches; very pale brown (10YR 7/4) sand; single grained; loose; strongly acid; gradual smooth boundary.

E3—53 to 68 inches; light gray (10YR 7/2) sand; single grained; loose; few fine prominent strong brown (7.5YR 5/6) masses of iron accumulation; strongly acid; clear smooth boundary.

Bh—68 to 80 inches; dark reddish gray (5YR 4/2) sand; few medium distinct splotches of pinkish gray (7.5YR 6/2) sand; weak fine granular structure; very friable; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

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Reaction: Very strongly acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 3

Texture—sand or fine sand

E horizon (upper part):

Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 3 to 8

Texture—sand or fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of red or yellow

E horizon (lower part, directly above the Bh horizon):

Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 1 to 4

Texture—sand, fine sand, loamy sand, or loamy fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Bh horizon:

Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1, 2, or, rarely, 3

Texture—sand, fine sand, or loamy sand

Redoximorphic features (where present)—few iron accumulations in shades of red or yellow

C horizon (where present):

Color—hue of 10YR, value of 4 to 7, and chroma of 1 to 5

Texture—sand, fine sand, or loamy sand

Redoximorphic features (where present)—few or common iron accumulations in shades of red or yellow and masses of iron depletion in shades of gray

Chipley Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Very rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Knolls and rises

Slope: 0 to 5 percent

Taxonomic class: Thermic, coated Aquic Quartzipsamments

The Chipley soils are commonly associated on the landscape with Alpin, Centenary, Foxworth, Hosford, Hurricane, Leon, and Pottsburg soils. The Alpin and Centenary soils are in the higher positions. The Alpin soils are excessively drained. The Centenary soils have a Bh horizon and are well drained. The Foxworth soils are in the slightly higher positions and are moderately well drained. The Hosford, Leon, and Pottsburg soils are in the lower positions. The Hosford soils are very poorly drained. The Leon and Pottsburg soils are poorly drained and have a Bh horizon. The Hurricane soils are in positions similar to those of the Chipley soils and have a Bh horizon below a depth 50 inches.

Typical Pedon

Chipley sand, in an area of Chipley-Foxworth complex, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 27 minutes 26 seconds N. and long. 84 degrees 54 minutes 13 seconds W.

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- Ap—0 to 6 inches; sand, dark brown (10YR 3/3) rubbed; salt-and-pepper appearance unrubbed due to many clean sand grains; weak fine granular structure; very friable; strongly acid; clear smooth boundary.
- C1—6 to 19 inches; light yellowish brown (10YR 6/4) sand; common uncoated sand grains; single grained; loose; strongly acid; gradual wavy boundary.
- C2—19 to 31 inches; light gray (10YR 7/2) sand; single grained; loose; few fine prominent strong brown (7.5YR 5/6) masses of iron accumulation; strongly acid; gradual smooth boundary.
- C3—31 to 39 inches; light gray (10YR 7/2) sand; single grained; loose; common fine prominent yellowish red (5YR 5/8) and common medium prominent brownish yellow (10YR 6/6) masses of iron accumulation; strongly acid; clear smooth boundary.
- Cg—39 to 80 inches; white (10YR 8/1) sand; single grained; loose; few fine prominent reddish yellow (7.5YR 6/8) masses of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 3

Texture—sand or fine sand

C horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 to 6

Texture—sand or fine sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and, where present, iron depletions in shades of gray

Cg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Chowan Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderately slow in the mineral horizons and moderately rapid to moderately slow in the organic horizon

Parent material: Loamy alluvium over organic material

Landscape: Coastal Plain

Landform: Flood plains

Slope: 0 to 1 percent

Taxonomic class: Fine-silty, mixed, active, nonacid, thermic Thapto-Histic Fluvaquents

The Chowan soils are commonly associated on the landscape with Brickyard, Garcon, Ochlockonee, Ousley, and Wahee soils. The associated soils do not have a buried layer of muck. The Brickyard soils are in the lower positions and are very poorly drained. The Garcon, Ousley, and Wahee soils are in the slightly higher positions and are somewhat poorly drained. The Ochlockonee soils are in the higher positions and are moderately well drained or well drained.

Typical Pedon

Chowan silty clay loam, in an area of Brickyard and Chowan soils, frequently flooded; in Liberty County, Florida; USGS Orange topographic quadrangle; lat. 30 degrees 1 minute 18 seconds N. and long. 85 degrees 3 minutes 44 seconds W.

A—0 to 5 inches; very dark grayish brown (10YR 3/2) silty clay loam; massive; friable; few medium roots; strongly acid; clear wavy boundary.

Cg—5 to 35 inches; gray (5Y 5/1) silty clay loam; massive; friable; common medium prominent strong brown (7.5YR 5/8) areas of iron accumulation; strongly acid; gradual wavy boundary.

2Oa—35 to 80 inches; black (5YR 2/1) sapric material; about 15 percent fibers unrubbed and less than 3 percent rubbed; massive; friable; common tree parts; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Reaction: Extremely acid to moderately acid in the mineral horizons and extremely acid or very strongly acid in the organic horizon

A horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2

Texture—loam, silt loam, or silty clay loam

Cg horizon:

Color—hue of 10YR to 5Y, value of 2 to 5, and chroma of 1 or 2

Texture—loam, silt loam, silty clay loam, or mucky loam

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

2Oa horizon:

Color—hue of 5YR to 2.5Y, value of 2 or 3, and chroma of 1 to 3

Texture—sapric material (more than 16 inches in thickness)

Cowarts Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Moderate to slow

Parent material: Loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges and hillslopes

Slope: 8 to 45 percent

Taxonomic class: Fine-loamy, kaolinitic, thermic Typic Kanhapludults

The Cowarts soils are commonly associated on the landscape with Blanton and Lucy soils. The Blanton soils are in positions similar to those of the Cowarts soils and have a Bt horizon at a depth of 40 to 80 inches. The Lucy soils are in the slightly higher positions and have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Cowarts fine sandy loam, 0 to 25 percent slopes; in Gadsden County, Florida; USGS Chattahoochee SE topographic quadrangle; lat. 30 degrees 39 minutes 30 seconds N. and long. 84 degrees 47 minutes 58 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; very friable; strongly acid; abrupt wavy boundary.

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- BE—8 to 12 inches; yellowish brown (10YR 5/4) fine sandy loam; weak medium granular structure; very friable; strongly acid; clear wavy boundary.
- Bt1—12 to 19 inches; yellowish brown (10YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; few faint clay films on faces of peds; sand grains coated and bridged with clay; strongly acid; gradual wavy boundary.
- Bt2—19 to 25 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; firm; about 3 percent, by volume, nodular plinthite; many coarse prominent yellowish red (5YR 5/8) and red (2.5YR 4/8) areas of iron accumulation; strongly acid; gradual wavy boundary.
- C—25 to 80 inches; 40 percent red (10R 5/6), 30 percent yellowish brown (10YR 5/6), and 30 percent light gray (10YR 7/2) sandy clay loam with pockets and strata of coarser and finer textured material; massive; very firm; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid or strongly acid throughout

A or Ap horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—loamy sand, loamy fine sand, sandy loam, fine sandy loam, or the gravelly analogs of these textures

E horizon (where present):

Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 4 to 8

Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam

BE horizon (where present):

Color—hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 4 to 8

Texture—sandy loam or fine sandy loam

Bt horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features (where present)—few or common iron accumulations in shades of brown, red, or yellow; 0 to 5 percent plinthite

BC horizon (where present):

Color—hue of 10R to 10YR, value of 4 to 8, and chroma of 1 to 8; or multicolored in shades of brown, red, yellow, or gray

Texture—sandy loam to sandy clay

C horizon:

Color—hue of 10R to 10YR, value of 4 to 8, and chroma of 1 to 8; or multicolored in shades of brown, red, yellow, or gray

Texture—loamy sand to clay; layers or pockets of finer and/or coarser material in some pedons

Redoximorphic features—few or common iron accumulations in shades of brown, red, or yellow

Croatan Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Rapid to moderately slow

Parent material: Residuum weathered from organic debris over loamy sediments

Landscape: Coastal Plain

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Landform: Flood plains

Slope: 0 to 1 percent

Taxonomic class: Loamy, siliceous, dysic, thermic Terric Haplosaprists

The Croatan soils are commonly associated on the landscape with Dorovan, Lynn Haven, Pamlico, Pantego, Pickney, Surrency, and Torhunta soils. The Dorovan, Pamlico, Pantego, Pickney, Surrency, and Torhunta soils are in positions similar to those of the Croatan soils. The Dorovan soils have organic layers with a combined thickness of more than 51 inches. The Pamlico soils have sandy mineral horizons below the muck. The Pantego, Pickney, Surrency, and Torhunta soils are mineral soils. The Lynn Haven soils are in the slightly higher positions and are mineral soils.

Typical Pedon

Croatan muck, in an area of Surrency, Pantego, and Croatan soils, depressional; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 16 minutes 48 seconds N. and long. 84 degrees 59 minutes 43 seconds W.

Oa—0 to 48 inches; black (10YR 2/1) muck; 10 percent fiber unrubbed and less than 1 percent rubbed; massive; slightly sticky; few fine roots; extremely acid; gradual wavy boundary.

Cg1—48 to 62 inches; light olive gray (5Y 6/2) sandy loam; massive; friable; extremely acid; gradual wavy boundary.

Cg2—62 to 80 inches; greenish gray (5GY 5/1) sandy clay; massive; firm, sticky and slightly plastic; extremely acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of muck: 16 to 51 inches

Reaction: Extremely acid in the organic material and extremely acid to slightly acid in the mineral horizons

Oa horizon:

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—muck; 10 to 30 percent fiber unrubbed and less than 10 percent rubbed

Ag horizon (where present):

Color—hue of 7.5YR to 5Y, value of 2 to 7, and chroma of 1 or 2

Texture—mucky sandy loam, mucky fine sandy loam, sandy loam, or fine sandy loam

Cg horizon:

Color—hue of 5GY to 5Y, value of 4 to 7, and chroma of 1 or 2

Texture—variable, ranging from sandy loam to clay

Dorovan Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Moderate

Parent material: Residuum weathered from organic debris over sandy sediments

Landscape: Coastal Plain

Landform: Depressions and flood plains

Slope: 0 to 1 percent

Taxonomic class: Dysic, thermic Typic Haplosaprists

The Dorovan soils are commonly associated on the landscape with Croatan, Lynn Haven, Pamlico, and Pickney soils. The Croatan, Pamlico, and Pickney soils

are in positions similar to those of the Dorovan soils. The Croatan and Pamlico soils have mineral horizons within a depth of 51 inches. The Pickney soils are mineral soils. The Lynn Haven soils are in the slightly higher positions and are mineral soils.

Typical Pedon

Dorovan muck, in an area of Dorovan-Pamlico complex, depressional; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 18 minutes 13 seconds N. and long. 84 degrees 58 minutes 23 seconds W.

Oa1—0 to 53 inches; black (N 2/0) muck; 15 percent fiber unrubbed and less than 1 percent rubbed; massive; slightly sticky; common fine roots; very strongly acid; diffuse irregular boundary.

Oa2—53 to 80 inches; black (10YR 2/1) muck; 10 percent fiber unrubbed and less than 1 percent rubbed; massive; slightly sticky; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth to sand: Greater than 51 inches

Reaction: Extremely acid or very strongly acid in the organic horizons and very strongly acid or strongly acid in the C horizon (where present)

Oe horizon (where present):

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—mucky peat; 50 to 90 percent fiber unrubbed and 25 to 60 percent rubbed

Oa horizon:

Color—hue of 7.5YR to 2.5Y, value of 2 or 3, and chroma of 1 or 2; or neutral in hue and value of 2 or 3

Texture—muck; 10 to 35 percent fiber unrubbed and 10 to less than 1 percent rubbed; a few logs and fragments of wood in the lower part of the horizon in some pedons

Cg horizon (where present):

Color—hue of 10YR, value of 2 to 5, and chroma of 1 or 2

Texture—sand, fine sand, loamy fine sand, or sandy loam

Dothan Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate or moderately slow

Parent material: Loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges, hills, and hillslopes

Slope: 0 to 12 percent

Taxonomic class: Fine-loamy, kaolinitic, thermic Plinthic Kandiodults

The Dothan soils are commonly associated on the landscape with Albany, Blanton, Fuquay, Goldsboro, and Stilson soils. The Albany, Blanton, and Stilson soils are in the lower positions and have a Bt horizon below a depth of 40 inches. The Goldsboro soils are in the slightly lower positions and are moderately well drained. The Fuquay soils are in positions similar to those of the Dothan soils and have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Dothan loamy sand, 2 to 5 percent slopes; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 7 minutes 15 seconds N. and long. 85 degrees 5 minutes 21 seconds W.

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

E—6 to 12 inches; yellowish brown (10YR 5/4) loamy fine sand; weak fine granular structure; friable; very strongly acid; gradual smooth boundary.

Bt—12 to 35 inches; strong brown (7.5YR 5/8) sandy clay loam; weak medium subangular blocky structure; firm; very strongly acid; clear wavy boundary.

Btv—35 to 80 inches; 40 percent light yellowish brown (10YR 6/4), 35 percent yellowish brown (10YR 5/6), and 25 percent light brownish gray (10YR 6/2) clay loam; massive parting to moderate medium subangular blocky structure; firm; about 5 percent, by volume, nodular plinthite; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 or 3

Texture—sand, loamy sand, loamy fine sand, sandy loam, or fine sandy loam

E horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 6

Texture—sand, loamy sand, loamy fine sand, sandy loam, or fine sandy loam

BE horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 to 7

Texture—sandy loam or fine sandy loam

Bt horizon:

Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 4 to 8

Texture—fine sandy loam, sandy loam, or sandy clay loam

Redoximorphic features (where present)—few or common areas of iron accumulation in shades of brown, red, or yellow

Btv horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 4 to 8; or no dominant matrix color and multicolored in shades of brown, gray, red, and yellow

Texture—sandy clay loam, clay loam, or sandy clay

Redoximorphic features—few to many areas of iron accumulation in shades of brown, red, or yellow and iron depletions in shades of gray; 5 to 25 percent plinthite

Elloree Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderately rapid

Parent material: Sandy and loamy alluvium

Landscape: Coastal Plain

Landform: Flood plains

Soil Survey of Liberty County, Florida

Slope: 0 to 2 percent

Taxonomic class: Loamy, siliceous, active, thermic Arenic Endoaqualfs

The Ellore soils are commonly associated on the landscape with Bibb, Meggett, and Rutlege soils. The Bibb and Meggett soils are in positions similar to those of the Ellore soils. The Bibb soils do not have a Bt horizon. The Meggett soils have a Bt horizon at a depth of less than 20 inches. The Rutlege soils are in the lower positions, do not have a Bt horizon, and are very poorly drained.

Typical Pedon

Ellore loamy sand, in an area of Ellore, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded; in Liberty County, Florida; USGS Ward topographic quadrangle; lat. 30 degrees 17 minutes 53 seconds N. and long. 84 degrees 43 minutes 21 seconds W.

- A—0 to 5 inches; very dark gray (10YR 3/1) loamy sand; weak fine granular structure; very friable; common fine and few medium roots; strongly acid; clear smooth boundary.
- E—5 to 29 inches; light brownish gray (10YR 6/2) sand; single grained; loose; few fine roots; strongly acid; clear wavy boundary.
- Btg1—29 to 36 inches; light gray (10YR 6/1) sandy loam; weak medium subangular blocky structure; friable; few fine roots; common fine prominent yellowish brown (10YR 5/8) areas of iron accumulation; slightly acid; gradual wavy boundary.
- Btg2—36 to 45 inches; gray (10YR 5/1) sandy loam; weak medium subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/8) and few fine prominent reddish yellow (7.5YR 6/8) areas of iron accumulation; neutral; gradual wavy boundary.
- BCg—45 to 57 inches; light gray (10YR 6/1) loamy sand; weak medium subangular blocky structure; very friable; few medium prominent yellowish brown mottles; neutral; gradual wavy boundary.
- Cg—57 to 80 inches; gray (10YR 5/1) sand; single grained; loose; few medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; neutral.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Strongly acid to neutral in the A and E horizons and strongly acid to moderately alkaline throughout the remainder of the profile

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 to 3

Texture—loamy fine sand or loamy sand

E horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or loamy fine sand

Btg horizon:

Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2

Texture—dominantly sandy loam or fine sandy loam; sandy clay loam in some pedons

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

BCg horizon:

Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2

Texture—loamy sand, sandy loam, or fine sandy loam

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Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Cg horizon:

Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2

Texture—sand, loamy sand, sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Foxworth Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Rapid or very rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges, knolls, and hillslopes

Slope: 0 to 25 percent

Taxonomic class: Thermic, coated Typic Quartzipsamments

The Foxworth soils are commonly associated on the landscape with Alpin, Centenary, Chipley, Lakeland, and Troup soils. The Alpin and Lakeland soils are in the higher positions and are excessively drained. The Centenary soils are in positions similar to those of the Foxworth soils and have a Bh horizon. The Chipley soils are in the lower positions and are somewhat poorly drained. The Troup soils are in the slightly higher positions and have a Bt horizon below a depth of 40 inches.

Typical Pedon

Foxworth sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 27 minutes 46 seconds N. and long. 84 degrees 53 minutes 53 seconds W.

Ap—0 to 9 inches; brown (10YR 5/3) sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

C1—9 to 26 inches; brownish yellow (10YR 6/6) sand; single grained; loose; strongly acid; gradual wavy boundary.

C2—26 to 37 inches; brownish yellow (10YR 6/6) sand; single grained; loose; few uncoated sand grains; strongly acid; gradual smooth boundary.

C3—37 to 54 inches; very pale brown (10YR 8/3) sand; single grained; loose; strongly acid; gradual smooth boundary.

C4—54 to 71 inches; very pale brown (10YR 8/3) sand; single grained; loose; few fine and many coarse prominent yellowish brown (10YR 5/8) areas of iron accumulation; moderately acid; clear smooth boundary.

Cg—71 to 80 inches; light gray (10YR 7/1) sand; single grained; loose; few medium prominent yellowish brown (10YR 5/8) masses of iron accumulation; moderately acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Very strongly acid to slightly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 3

Texture—sand or fine sand

Soil Survey of Liberty County, Florida

C horizon:

Color—hue of 10YR, value of 5 to 8, and chroma of 3 to 8

Texture—sand or fine sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow and/or masses of iron depletion in shades of gray below a depth of 40 inches

Cg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2

Texture—sand, fine sand, or coarse sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow

Fuquay Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately slow or moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Hills, ridges, and hillslopes

Slope: 0 to 12 percent

Taxonomic class: Loamy, kaolinitic, thermic Arenic Plinthic Kandiodults

The Fuquay soils are commonly associated on the landscape with Albany, Blanton, Dothan, Goldsboro, and Stilson soils. The Albany soils are in the lower positions, are somewhat poorly drained, and have a Bt horizon below a depth of 40 inches. The Blanton and Stilson soils are in the slightly lower positions. The Blanton soils are moderately well drained and have a Bt horizon at a depth of 40 to 80 inches. The Stilson soils are moderately well drained. The Dothan soils and the moderately well drained Goldsboro soils are in positions similar to those of the Fuquay soils and have a Bt horizon at a depth of less than 20 inches.

Typical Pedon

Fuquay loamy sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 25 minutes 34 seconds N. and long. 84 degrees 57 minutes 31 seconds W.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) loamy sand; weak medium granular structure; very friable; moderately acid; abrupt smooth boundary.

E—6 to 26 inches; brown (10YR 5/3) sand; single grained; loose; very strongly acid; clear wavy boundary.

Bt—26 to 50 inches; reddish yellow (7.5YR 6/6) sandy loam; weak medium subangular blocky structure; very friable; few ironstone nodules; very strongly acid; gradual wavy boundary.

Btv1—50 to 62 inches; 50 percent brownish yellow (10YR 6/6) and 50 percent yellowish brown (10YR 5/8) sandy clay loam; weak medium subangular blocky structure; firm; about 7 percent, by volume, nodular plinthite; few fine and medium prominent light gray (10YR 7/2) areas of iron depletion; very strongly acid; gradual wavy boundary.

Btv2—62 to 80 inches; 55 percent brownish yellow (10YR 6/6) and 45 percent yellowish brown (10Y 5/6) sandy clay loam; weak medium subangular blocky structure; firm; about 15 percent, by volume, nodular plinthite; few fine and medium prominent light gray (10YR 7/2) areas of iron depletion; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Very strongly acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 to 3

Texture—sand or loamy sand

E horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 3 to 6

Texture—sand or loamy sand

Bt horizon:

Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 4 to 8

Texture—sandy loam or sandy clay loam

Redoximorphic features (where present)—few or common areas of iron accumulation in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Btv horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 2 to 8; or multicolored in shades of brown, yellow, red, olive, and gray

Texture—sandy loam or sandy clay loam

Redoximorphic features (where present)—few or common areas of iron accumulation in shades of brown, red, or yellow and masses of iron depletion in shades of gray; 5 to 32 percent plinthite

C horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 7

Texture—loamy sand or sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Garcon Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Stream terraces

Slope: 0 to 2 percent

Taxonomic class: Loamy, siliceous, active, thermic Aquic Arenic Hapludults

The Garcon soils are commonly associated on the landscape with Brickyard, Chowan, Ochlockonee, Ousley, and Wahee soils. The Brickyard and Chowan soils are in the lower positions and are more poorly drained than the Garcon soils. The Ochlockonee soils are in the higher positions and are well drained. The Ousley and Wahee soils are in positions similar to those of the Garcon soils. The Ousley soils do not have a Bt horizon. The Wahee soils have a Bt horizon within a depth of 20 inches.

Typical Pedon

Garcon fine sand, in an area of Garcon, Ochlockonee, and Ousley soils, occasionally flooded; in Liberty County, Florida; USGS Ward topographic quadrangle; lat. 30 degrees 22 minutes 12 seconds N. and long. 84 degrees 40 minutes 25 seconds W.

- A—0 to 8 inches; very dark grayish brown (10YR 3/2) fine sand; weak fine granular structure; very friable; many fine roots; very strongly acid; clear smooth boundary.
- E—8 to 22 inches; brown (10YR 5/3) fine sand; single grained; loose; few fine roots; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; very strongly acid; clear wavy boundary.
- Bt—22 to 31 inches; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; common large prominent yellowish brown (10YR 5/8) areas of iron accumulation and common medium prominent light brownish gray (10YR 6/2) areas of iron depletion; extremely acid; gradual wavy boundary.
- Btg—31 to 44 inches; gray (10YR 5/1) fine sandy loam; weak medium subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/8) and few medium prominent yellowish red (5YR 5/8) areas of iron accumulation; extremely acid; gradual wavy boundary.
- Cg—44 to 80 inches; light gray (10YR 6/1) fine sand; single grained; loose; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; extremely acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Extremely acid to strongly acid throughout

A horizon:

Color—hue of 10YR, value of 2 to 4, and chroma of 1 or 2

Texture—sand, fine sand, or loamy fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 or 4

Texture—sand, fine sand, or loamy fine sand

Redoximorphic features—few to many iron accumulations in shades of brown or yellow and iron depletions in shades of gray

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 6

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and iron depletions in shades of gray

Btg horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 8, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Goldhead Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods and depressions

Slope: 0 to 2 percent

Taxonomic class: Loamy, siliceous, active, thermic Arenic Endoaqualfs

The Goldhead soils are commonly associated on the landscape with Meadowbrook, Pantego, and Surrency soils. The Meadowbrook soils are in positions similar to those of the Goldhead soils and have a Bt horizon at a depth of 40 to 80 inches. The Pantego and Surrency soils are in the slightly lower positions and have an umbric horizon.

Typical Pedon

Goldhead sand; in Liberty County, Florida; USGS Sanborn topographic quadrangle; lat. 30 degrees 0 minutes 42 seconds N. and long. 84 degrees 36 minutes 53 seconds W.

A—0 to 6 inches; very dark brown (10YR 3/2) sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

Eg1—6 to 13 inches; grayish brown (10YR 5/2) sand; single grained; loose; slightly acid; gradual wavy boundary.

Eg2—13 to 32 inches; light brownish gray (10YR 6/2) sand; single grained; loose; few medium faint brown (10YR 5/3) areas of iron accumulation; slightly acid; gradual wavy boundary.

Btg—32 to 56 inches; light gray (10YR 7/1) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent brownish yellow (10YR 6/8) areas of iron accumulation; neutral; gradual wavy boundary.

Cg—56 to 80 inches; light brownish gray (10YR 6/2) sand; single grained; loose; common medium prominent yellowish red (5YR 5/6) and few medium prominent yellowish brown (10YR 5/6) areas of iron accumulation; slightly alkaline.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Strongly acid to neutral in the A and E horizons and slightly acid to moderately alkaline in the B and C horizons

A or Ap horizon:

Color—hue of 10YR, value of 2 to 4, and chroma of 1 or 2

Texture—sand or fine sand

Eg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Btg horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sandy loam, sandy clay loam, or fine sandy loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sand, fine sand, or loamy sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Goldsboro Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Moderate

Parent material: Loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Knolls and rises

Slope: 0 to 5 percent

Taxonomic class: Fine-loamy, siliceous, subactive, thermic Aquic Paleudults

The Goldsboro soils are commonly associated on the landscape with Albany, Blanton, Dothan, Fuquay, and Stilson soils. The Albany soils are in the lower positions, are somewhat poorly drained, and have a Bt horizon below a depth of 40 inches. The Blanton and Stilson soils are in positions similar to those of the Goldsboro soils. The Blanton soils have a Bt horizon below a depth of 40 inches. The Stilson soils have a Bt horizon at a depth of 20 to 40 inches. The Dothan and Fuquay soils are in the slightly higher positions and are well drained. Also, the Fuquay soils have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Goldsboro loamy sand, 2 to 5 percent slopes; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 1 minute 53 seconds N. and long. 85 degrees 1 minute 8 seconds W.

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

E—4 to 14 inches; light yellowish brown (2.5Y 6/4) loamy fine sand; weak fine granular structure; very friable; very strongly acid; clear wavy boundary.

Bt1—14 to 26 inches; yellowish brown (10YR 5/6) sandy clay loam; weak fine subangular blocky structure; friable; very strongly acid; gradual wavy boundary.

Bt2—26 to 48 inches; yellowish brown (10YR 5/6) sandy clay loam; weak fine subangular blocky structure; friable; common medium faint yellowish red (5YR 5/6) and common medium faint strong brown (7.5YR 5/8) areas of iron accumulation; common fine prominent light brownish gray (10YR 6/2) areas of iron depletion; very strongly acid; gradual wavy boundary.

Bt3—48 to 72 inches; light olive brown (2.5Y 5/6) sandy clay loam; weak fine subangular blocky structure; friable; common medium faint red (2.5YR 4/6), strong brown (7.5YR 5/6), and light yellowish brown (10YR 6/4) areas of iron accumulation; common medium prominent light brownish gray (10YR 6/2) areas of iron depletion; very strongly acid; gradual wavy boundary.

Btg—72 to 80 inches; light gray (10YR 6/1) sandy loam; weak fine subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/6) and light olive brown (2.5Y 5/6) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

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A or Ap horizon:

Color—hue of 10YR, value of 2 to 6, and chroma of 1 to 4

Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 6

Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam

Bt horizon (upper part):

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 4 to 8

Texture—sandy clay loam, sandy loam, or clay loam

Bt horizon (lower part):

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 4 to 8

Texture—sandy clay loam, sandy loam, or clay loam

Redoximorphic features (where present)—few or common areas of iron accumulation in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sandy clay loam, sandy loam, or clay loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2

Texture—sandy, loamy, or clayey; stratified in some pedons

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow

Hosford Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Lower hillslopes

Slope: 2 to 12 percent

Taxonomic class: Sandy, siliceous, thermic Cumulic Humaquepts

The Hosford soils are commonly associated on the landscape with Chipley, Hurricane, Leon, Osier, and Pottsburg soils. The Chipley and Hurricane soils are in the higher positions and are somewhat poorly drained. Also, the Hurricane soils have a Bh horizon. The Leon and Pottsburg soils are in the slightly higher positions, have a Bh horizon, and are poorly drained. The Osier soils are not on the lower side slopes and are poorly drained.

Typical Pedon

Hosford mucky coarse sand, 2 to 8 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 27 minutes 37 seconds N. and long. 84 degrees 54 minutes 52 seconds W.

A1—0 to 4 inches; black (10YR 2/1) mucky coarse sand; weak fine granular structure; very friable; many fine and medium and few coarse roots; extremely acid; clear wavy boundary.

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A2—4 to 66 inches; very dark grayish brown (10YR 3/2) mucky coarse sand; weak fine granular structure; very friable; common fine and few medium roots; faint odor of sulfur dioxide; extremely acid; clear wavy boundary.

Cg—66 to 80 inches; dark grayish brown (10YR 4/2) sand; weak fine granular structure; very friable; few fine roots; faint odor of sulfur dioxide; extremely acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout

Oa horizon (where present):

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2; or neutral in hue and value of 2 or 3

Texture—muck (does not exceed 7 inches in thickness)

A horizon:

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 2 or less

Texture—sand, coarse sand, fine sand, or their mucky analogs

Cg horizon:

Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 2 or less

Texture—sand or fine sand

Hurricane Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Moderately rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Knolls and rises

Slope: 0 to 3 percent

Taxonomic class: Sandy, siliceous, thermic Oxyaquic Alorthods

The Hurricane soils are commonly associated on the landscape with Chipley, Hosford, Leon, Osier, and Pottsburg soils. The Chipley soils are in positions similar to those of the Hurricane soils and do not have a Bh horizon. The Hosford, Leon, Osier, and Pottsburg soils are in the lower positions. The Hosford and Osier soils do not have a Bh horizon and are more poorly drained than the Hurricane soils. The Leon soils have a Bh horizon at a depth of 10 to 30 inches and are poorly drained. The Pottsburg soils are poorly drained.

Typical Pedon

Hurricane sand, in an area of Hurricane and Chipley soils, 0 to 3 percent slopes; in Liberty County, Florida; USGS Bloxham topographic quadrangle; lat. 30 degrees 24 minutes 46 seconds N. and long. 84 degrees 41 minutes 54 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

E—8 to 24 inches; light yellowish brown (10YR 6/4) sand; single grained; loose; strongly acid; gradual wavy boundary.

Eg1—24 to 37 inches; light gray (10YR 7/2) sand; single grained; loose; few fine prominent reddish yellow (7.5YR 6/8) masses of iron accumulation; many medium areas of clean sand grains; strongly acid; clear wavy boundary.

Eg2—37 to 54 inches; light gray (10YR 7/2) sand; single grained; loose; many fine

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and medium prominent reddish yellow (7.5YR 6/8) and many fine prominent yellowish red (5YR 5/8) masses of iron accumulation; strongly acid; clear irregular boundary.

Eg3—54 to 64 inches; pinkish gray (7.5YR 6/2) sand; single grained; loose; few fine prominent yellowish red (5YR 5/8) masses of iron accumulation; strongly acid; clear boundary.

Bh—64 to 80 inches; dark reddish brown (5YR 2.5/2) sand; weak fine granular structure; very friable; few firm black (5YR 2.5/1) nodules; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 3

Texture—sand or fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 3 to 8

Texture—sand or fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow

Eg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray or olive

EB or BE horizon (where present):

Color—hue of 7.5YR or 10YR, value of 4, and chroma of 2 or 3

Texture—sand, fine sand, loamy sand, or loamy fine sand

Redoximorphic features—few or common iron accumulations in shades of red or yellow and masses of iron depletion in shades of gray

Bh horizon:

Color—hue of 5YR to 10YR, value of 2 to 5, and chroma of 4 or less

Texture—sand, fine sand, loamy sand, or loamy fine sand

Lakeland Series

Depth class: Very deep

Drainage class: Excessively drained

Permeability: Rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain uplands

Landform: Hills, ridges, and hillslopes

Slope: 0 to 85 percent

Taxonomic class: Thermic, coated Typic Quartzipsamments

The Lakeland soils are commonly associated on the landscape with Alpin, Centenary, Foxworth, and Troup soils. The Alpin soils are in positions similar to those of the Lakeland soils and have loamy sand lamellae that are less than 5 millimeters in thickness and that are below a depth of 40 inches. The Centenary and Foxworth soils are in the lower positions. The Centenary soils have a Bh horizon and are moderately

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well drained. The Foxworth soils are moderately well drained. The Troup soils are in the slightly lower positions and have a Bt horizon below a depth of 40 inches.

Typical Pedon

Lakeland sand, 5 to 8 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 28 minutes 36 seconds N. and long. 84 degrees 54 minutes 56 seconds W.

- A—0 to 5 inches; brown (10YR 5/3) sand; weak fine granular structure; very friable; very strongly acid; clear wavy boundary.
C1—5 to 46 inches; brownish yellow (10YR 6/6) sand; single grained; loose; strongly acid; diffuse wavy boundary.
C2—46 to 80 inches; yellow (10YR 7/6) sand; single grained; loose; many uncoated sand grains; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Very strongly acid to slightly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 4

Texture—sand or fine sand

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 7, and chroma of 3 to 8; the small areas of uncoated sand grains that occur in some pedons are not related to wetness.

Texture—sand or fine sand

Leefield Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Moderately slow or slow

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Knolls and rises

Slope: 0 to 5 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Arenic Plinthaquic Paleudults

The Leefield soils are commonly associated on the landscape with Bladen, Lynchburg, Rains, and Woodington soils. The Bladen, Rains, and Woodington soils are in the lower positions and are poorly drained. The Lynchburg soils are in positions similar to those of the Leefield soils and have a Bt horizon within a depth of 20 inches.

Typical Pedon

Leefield loamy sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 18 minutes 1 second N. and long. 84 degrees 53 minutes 34 seconds W.

- Ap—0 to 3 inches; very dark brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; very strongly acid; abrupt wavy boundary.
E1—3 to 8 inches; light olive brown (2.5Y 5/4) sand; single grained; loose; very strongly acid; clear wavy boundary.

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- E2—8 to 21 inches; yellow (2.5Y 7/6) sand; single grained; loose; strongly acid; gradual wavy boundary.
- Bt1—21 to 33 inches; yellow (10YR 7/6) sandy loam; moderate medium subangular blocky structure; friable; common medium distinct yellowish brown (10YR 5/8) areas of iron accumulation; few medium distinct light brownish gray (10YR 6/2) areas of iron depletion; strongly acid; gradual wavy boundary.
- Bt2—33 to 60 inches; yellowish brown (10YR 5/8) sandy clay loam; moderate coarse subangular blocky structure; friable; common coarse prominent reddish brown (2.5YR 5/4) areas of iron accumulation; common coarse prominent light gray (10YR 6/1) masses of iron depletion; strongly acid; gradual wavy boundary.
- Btv—60 to 80 inches; light gray (10YR 7/2) sandy clay loam; moderate coarse subangular blocky structure; friable; about 10 percent, by volume, plinthite nodules; common large prominent strong brown (7.5YR 5/8) and reddish brown (2.5YR 4/4) areas of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Very strongly acid or strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or loamy fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 8

Texture—sand, fine sand, loamy sand, or loamy fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow and iron depletions in shades of gray

BE horizon (where present):

Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 3 to 8

Texture—loamy sand or sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow and iron depletions in shades of gray

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 4 to 8

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and iron depletions in shades of gray

Btv horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 to 8; or multicolored in shades of brown, red, yellow, and gray

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and iron depletions in shades of gray; 5 to 15 percent, by volume, plinthite

Leon Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate or moderately slow

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Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Aeric Alaquods

The Leon soils are commonly associated on the landscape with Chipley, Hosford, Hurricane, Osier, and Pottsburg soils. The Chipley and Hurricane soils are in the slightly higher positions. The Chipley soils are somewhat poorly drained and do not have a Bh horizon. The Hurricane soils are somewhat poorly drained. The Hosford soils are on seepage slopes, do not have a Bh horizon, and are very poorly drained. The Osier soils are in the slightly lower positions and do not have a Bh horizon. The Pottsburg soils are in positions similar to those of the Leon soils and have a Bh horizon below a depth of 50 inches.

Typical Pedon

Leon sand, in an area of Leon-Chipley complex; in Liberty County, Florida; USGS Hosford topographic quadrangle; lat. 30 degrees 26 minutes 18 seconds N. and long. 84 degrees 50 minutes 32 seconds W.

Ap—0 to 4 inches; dark brown (7.5YR 3/2) sand; weak fine granular structure; very friable; extremely acid; abrupt wavy boundary.

E—4 to 18 inches; white (10YR 8/1) sand; single grained; loose; strongly acid; gradual irregular boundary.

Bh—18 to 27 inches; dark reddish brown (5YR 3/2) sand; weak fine granular structure; very friable; very strongly acid; gradual wavy boundary.

C1—27 to 51 inches; brown (7.5YR 5/4) sand; single grained; loose; strongly acid; gradual wavy boundary.

C2—51 to 80 inches; white (10YR 8/1) sand; single grained; loose; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2; salt-and-pepper appearance in some pedons due to organic matter and clean sand grains

Texture—sand or fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 to 3

Texture—sand or fine sand

Redoximorphic features (where present)—few or common masses of iron depletion in shades of gray

Bh horizon:

Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 4; few or common vertical or horizontal streaks or pockets of sand in shades of gray in some pedons

Texture—sand, fine sand, loamy sand, or loamy fine sand

E' horizon (where present):

Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 1 to 3

Texture—sand or fine sand

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B^h horizon (where present):

Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 4

Texture—sand, fine sand, loamy sand, or loamy fine sand

C horizon (where present):

Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 1 to 6

Texture—sand or fine sand

Lucy Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Hills, ridges, and hillslopes

Slope: 0 to 45 percent

Taxonomic class: Loamy, kaolinitic, thermic Arenic Kandiudults

The Lucy soils are commonly associated on the landscape with Brantley, Cowarts, and Okeelala soils. The associated soils are in positions similar to those of the Lucy soils and have a Bt horizon at a depth of less than 20 inches.

Typical Pedon

Lucy sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 24 minutes 39 seconds N. and long. 84 degrees 57 minutes 3 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) sand; weak fine granular structure; very friable; very strongly acid; abrupt smooth boundary.

E—8 to 26 inches; strong brown (7.5YR 5/6) sand; single grained; loose; moderately acid; gradual wavy boundary.

Bt1—26 to 35 inches; yellowish red (5YR 5/6) sandy loam; weak medium subangular blocky structure; friable; strongly acid; gradual wavy boundary.

Bt2—35 to 80 inches; yellowish red (5YR 5/8) sandy loam; weak coarse subangular blocky structure; friable; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Very strongly acid to moderately acid in the A and E horizons, except where lime has been applied, and very strongly acid or strongly acid in the subsoil

A or Ap horizon:

Color—hue of 10YR, value of 3 to 6, and chroma of 2 to 4

Texture—sand, fine sand, or loamy fine sand

E horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 4 to 8

Texture—sand, fine sand, or loamy sand

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features (where present)—few or common iron accumulations in shades of brown

Lynchburg Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Moderate

Parent material: Loamy marine sediments

Landscape: Coastal Plain

Landform: Marine terraces and flats

Slope: 0 to 2 percent

Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Aeric Paleaquults

The Lynchburg soils are commonly associated on the landscape with Bladen, Leefield, Rains, and Woodington soils. The Bladen, Rains, and Woodington soils are in the lower positions and are poorly drained. The Leefield soils are in positions similar to those of the Lynchburg soils and have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Lynchburg loamy sand; in Liberty County, Florida; USGS Estifanulga topographic quadrangle; lat. 30 degrees 15 minutes 14 seconds N. and long. 85 degrees 2 minutes 24 seconds W.

- A—0 to 5 inches; very dark gray (10YR 3/1) loamy sand; weak medium granular structure; very friable; strongly acid; clear wavy boundary.
- E1—5 to 9 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; very friable; few fine faint brown (7.5YR 5/3) areas of iron accumulation; very strongly acid; clear wavy boundary.
- E2—9 to 14 inches; light olive brown (2.5Y 5/4) fine sandy loam; weak fine granular structure; very friable; few fine faint yellowish brown (10YR 5/6) and common fine faint yellowish red (5YR 5/6) areas of iron accumulation; few fine faint grayish brown (10YR 5/2) masses of iron depletion; very strongly acid; clear wavy boundary.
- Bt—14 to 18 inches; light olive brown (2.5Y 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; common medium faint yellowish brown (10YR 5/6) and common fine faint yellowish red (5YR 5/6) areas of iron accumulation; common medium prominent grayish brown (10YR 5/2) masses of iron depletion; very strongly acid; clear wavy boundary.
- Btg1—18 to 36 inches; grayish brown (10YR 5/2) sandy clay loam; moderate medium subangular blocky structure; friable; many medium prominent yellowish red (5YR 5/6) and common medium prominent yellowish brown (10YR 5/6) areas of iron accumulation; common fine faint brown (7.5YR 5/3) areas of iron depletion; very strongly acid; clear wavy boundary.
- Btg2—36 to 48 inches; grayish brown (10YR 5/2) sandy clay loam; moderate medium subangular blocky structure; firm; many medium prominent strong brown (7.5YR 5/6) and many medium prominent yellowish red (5YR 5/6) areas of iron accumulation; very strongly acid; clear wavy boundary.
- BCg1—48 to 65 inches; dark gray (10YR 4/1) clay loam; weak medium subangular blocky structure; very firm; common medium prominent yellowish brown (10YR 5/6) and few fine prominent yellowish red (5YR 5/6) areas of iron accumulation; very strongly acid; clear wavy boundary.
- BCg2—65 to 80 inches; gray (5Y 5/1) clay; weak medium subangular blocky structure; very firm; many medium prominent strong brown (7.5YR 5/6) and few medium faint reddish brown (5YR 5/3) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or fine sandy loam

E horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 to 4

Texture—sand, fine sand, loamy sand, or fine sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, yellow, or red and iron depletions in shades of brown or gray

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8

Texture—sandy clay loam or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and iron depletions in shades of brown or gray

Btg horizon:

Color—hue of 10YR or 5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sandy clay loam or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

BCg horizon:

Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sandy clay loam, clay loam, or clay

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Lynn Haven Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderately rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Typic Alaquods

The Lynn Haven soils are commonly associated on the landscape with Croatan, Dorovan, Pamlico, Pickney, and Torhunta soils. The associated soils are in the lower positions and are very poorly drained. The Croatan, Dorovan, and Pamlico soils are organic soils. The Pickney and Torhunta soils do not have a Bh horizon.

Typical Pedon

Lynn Haven sand, in an area of Torhunta-Lynn Haven-Croatan complex, frequently flooded; in Liberty County, Florida; USGS Thousand Yard Bay topographic quadrangle; lat. 30 degrees 2 minutes 8 seconds N. and long. 84 degrees 42 minutes 27 seconds W.

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- A1—0 to 3 inches; black (10YR 2/1) sand; weak fine granular structure; friable; common fine roots; very strongly acid; clear smooth boundary.
- A2—3 to 14 inches; very dark gray (10YR 3/1) fine sand; weak fine granular structure; very friable; common clean sand grains; many fine and few medium roots; strongly acid; clear wavy boundary.
- Eg—14 to 29 inches; light gray (10YR 6/1) fine sand; single grained; loose; few fine roots; very strongly acid; gradual wavy boundary.
- Bh—29 to 35 inches; very dark gray (10YR 3/1) fine sand; weak fine granular structure; very friable; very strongly acid; gradual wavy boundary.
- Cg1—35 to 50 inches; light brownish gray (10YR 6/2) fine sand; single grained; loose; strongly acid; gradual wavy boundary.
- Cg2—50 to 80 inches; light olive brown (2.5Y 5/3) fine sand; single grained; loose; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to strongly acid throughout

Other features: Some pedons have a bisequum of E' and B'h horizons that have the same range in colors and textures as the E and Bh horizons.

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—sand, fine sand, or mucky fine sand

Eg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Bh horizon:

Color—hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 3

Texture—fine sand

Cg horizon:

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 3

Texture—fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow

Meadowbrook Series

Depth class: Very deep

Drainage class: Poorly drained and very poorly drained

Permeability: Moderately slow

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods and sloughs

Slope: 0 to 2 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Grossarenic Endoaqualfs

The Meadowbrook soils are commonly associated on the landscape with Goldhead, Pantego, and Surrency soils. The Goldhead soils are in positions similar to those of the Meadowbrook soils and have a Bt horizon at a depth of 20 to 40 inches. The Pantego and Surrency soils are in the lower positions, have a Bt horizon within a depth of 40 inches, and are very poorly drained.

Typical Pedon

Meadowbrook sand, slough; in Liberty County, Florida; USGS Sanborn topographic quadrangle; lat. 30 degrees 1 minute 9 seconds N. and long. 84 degrees 36 minutes 22 seconds W.

- A—0 to 6 inches; black (10YR 2/1) sand; weak fine granular structure; very friable; many fine roots; moderately acid; clear smooth boundary.
- E—6 to 18 inches; light brownish gray (10YR 6/2) sand; single grained; loose; common fine prominent brownish yellow (10YR 6/8) areas of iron accumulation; few fine roots; moderately acid; gradual wavy boundary.
- Bw—18 to 46 inches; brown (10YR 4/3) sand; single grained; loose; moderately acid; clear wavy boundary.
- Btg—46 to 80 inches; light brownish gray (10YR 6/2) sandy loam; weak coarse subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/8) and many fine prominent reddish yellow (7.5YR 6/8) areas of iron accumulation; slightly alkaline.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

Reaction: Extremely acid to neutral in the A horizon, extremely acid to moderately alkaline in the E horizon, and very strongly acid to moderately alkaline in the Bw and Bt horizons

A horizon:

Color—hue of 10YR, value of 2 to 4, and chroma of 1 or 2

Texture—sand, fine sand, or their mucky analogs

E horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 to 3

Texture—sand or fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Bw horizon (where present):

Color—hue of 10YR, value of 4 to 7, and chroma of 3 to 7

Texture—sand or fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, or sandy clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Meggett Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Slow

Parent material: Clayey marine or alluvial sediments

Landscape: Coastal Plain

Landform: Flood plains

Slope: 0 to 3 percent

Taxonomic class: Fine, mixed, active, thermic Typic Albaqualfs

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The Meggett soils are commonly associated on the landscape with Bibb, Ellore, and Rutlege soils. The Bibb and Ellore soils are in positions similar to those of the Meggett soils. The Bibb soils do not have a Bt horizon. The Ellore soils have a Bt horizon at a depth of 20 to 40 inches. The Rutlege soils are in the lower positions, do not have a Bt horizon, and are very poorly drained.

Typical Pedon

Meggett sandy loam, in an area of Ellore, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded; in Liberty County, Florida; USGS Ward topographic quadrangle; lat. 30 degrees 18 minutes 13 seconds N. and long. 84 degrees 43 minutes 38 seconds W.

- A—0 to 4 inches; very dark gray (10YR 3/1) sandy loam; weak fine granular structure; very friable; many fine and few medium roots; strongly acid; clear smooth boundary.
- E—4 to 13 inches; light brownish gray (10YR 6/2) sandy loam; weak fine granular structure; very friable; many fine roots; very strongly acid; clear wavy boundary.
- Btg1—13 to 21 inches; light gray (10YR 6/1) sandy clay; strong medium subangular blocky structure; firm, sticky; few fine roots; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; slightly acid; gradual wavy boundary.
- Btg2—21 to 36 inches; gray (10YR 5/1) clay; strong medium subangular blocky structure; very firm, sticky; common medium prominent yellowish brown (10YR 5/8) and few fine prominent reddish yellow (7.5YR 6/8) areas of iron accumulation; neutral; gradual wavy boundary.
- Btg3—36 to 72 inches; olive gray (5Y 5/1) clay; strong medium subangular blocky structure; very firm, sticky; common large prominent yellowish brown (10YR 5/8) areas of iron accumulation; neutral; gradual wavy boundary.
- Btg4—72 to 80 inches; olive gray (5Y 5/1) sandy clay; strong medium subangular blocky structure; firm, sticky; few medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; neutral.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid to slightly acid in the A and E horizons and strongly acid to moderately alkaline throughout the remainder of the profile

A horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 3

Texture—sandy loam, fine sandy loam, loam, or loamy sand

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, loam, or loamy sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Btg horizon:

Color—hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2; or multicolored in shades of brown, gray, olive, and yellow

Texture—clay, sandy clay, or clay loam; 0 to 10 percent shell fragments

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

BCg horizon (where present):

Color—hue of 10YR to 5BG, value of 5 to 7, and chroma of 1 or 2

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Texture—sandy clay loam, sandy clay, or clay
Redoximorphic features (where present)—few or common iron accumulations in shades of brown, red, or yellow

Ochlockonee Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderately rapid

Parent material: Loamy alluvium

Landscape: Coastal Plain

Landform: Stream terraces on flood plains

Slope: 0 to 3 percent

Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents

The Ochlockonee soils are commonly associated on the landscape with Brickyard, Chowan, Garcon, Ousley, and Wahee soils. The Brickyard, Chowan, and Ousley soils are in the lower positions. The Brickyard and Chowan soils are poorly drained or very poorly drained. The Ousley soils are somewhat poorly drained. The Garcon and Wahee soils are in the slightly lower positions, are somewhat poorly drained, and have a Bt horizon.

Typical Pedon

Ochlockonee loamy sand, in an area of Wahee and Ochlockonee soils, 0 to 3 percent slopes, frequently flooded; in Liberty County, Florida; USGS Orange topographic quadrangle; lat. 30 degrees 11 minutes 39 seconds N. and long. 85 degrees 7 minutes 18 seconds W.

- A—0 to 6 inches; dark yellowish brown (10YR 4/4) loamy sand; weak fine granular structure; very friable; many fine and few medium roots; strongly acid; clear smooth boundary.
- C1—6 to 35 inches; 60 percent strong brown (7.5YR 4/6) and 40 percent light yellowish brown (10YR 6/4) loamy fine sand; massive; friable; few fine roots; very strongly acid; clear wavy boundary.
- C2—35 to 45 inches; 50 percent very pale brown (10YR 7/3) and 50 percent light yellowish brown (10YR 6/4) loamy fine sand; massive; friable; very strongly acid; gradual wavy boundary.
- C3—45 to 80 inches; yellowish brown (10YR 6/4) stratified sandy loam and loamy sand; massive; friable; common medium distinct strong brown (7.5YR 5/6) areas of iron accumulation; common medium distinct light gray (10YR 7/2) masses of iron depletion; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Reaction: Very strongly acid to moderately acid throughout

A or Ap horizon:

Color—hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 4

Texture—sandy loam, fine sandy loam, loam, loamy fine sand, or loamy sand

C horizon:

Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 8; or multicolored in shades of brown and yellow

Texture—sandy loam, fine sandy loam, loam, loamy fine sand, or loamy sand

Redoximorphic features—few or common iron accumulations in shades of brown or yellow and iron depletions in shades of gray

Okeelala Series

Depth class: Very deep

Drainage class: Well drained

Permeability: Moderate

Parent material: Loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Ridges and hillslopes

Slope: 8 to 45 percent

Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Ultic Hapludalfs

The Okeelala soils are commonly associated on the landscape with Brantley and Lucy soils. The associated soils are in positions similar to those of the Okeelala soils. The Brantley soils have a clayey Bt horizon. The Lucy soils have a Bt horizon at a depth of 20 to 40 inches.

Typical Pedon

Okeelala sandy loam, in an area of Brantley-Okeelala-Lucy complex, 8 to 45 percent slopes; in Liberty County, Florida; USGS Rock Bluff topographic quadrangle; lat. 30 degrees 34 minutes 39 seconds N. and long. 84 degrees 56 minutes 45 seconds W.

- A—0 to 7 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; very friable; strongly acid; clear smooth boundary.
- E—7 to 16 inches; light yellowish brown (10YR 6/4) sandy loam; weak fine granular structure; very friable; strongly acid; clear wavy boundary.
- Bt1—16 to 42 inches; yellowish red (5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; friable; strongly acid; gradual wavy boundary.
- Bt2—42 to 52 inches; yellowish red (5YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; few medium faint yellowish brown (10YR 5/6) areas of iron accumulation; strongly acid; gradual wavy boundary.
- C—52 to 80 inches; yellowish brown (10YR 5/6) fine sandy loam; massive parting to weak coarse subangular blocky structure; friable; few large faint strong brown (7.5YR 5/6) areas of iron accumulation; few fine flakes of mica; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid or strongly acid throughout

A or Ap horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—sand, fine sandy loam, loamy sand, or sandy loam

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 to 6

Texture—sand, fine sandy loam, loamy sand, or sandy loam

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8

Texture—sandy loam, sandy clay loam, or clay loam

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow in the lower part of the horizon

C horizon:

Color—hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 4 to 8; or multicolored in shades of brown, red, and yellow

Soil Survey of Liberty County, Florida

Texture—sand, loamy fine sand, or fine sandy loam
Content of mica flakes—few to many
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Osier Series

Depth class: Very deep
Drainage class: Poorly drained
Permeability: Rapid
Parent material: Sandy alluvial sediments
Landscape: Coastal Plain
Landform: Flats
Slope: 0 to 2 percent
Taxonomic class: Siliceous, thermic, Typic Psammaquents

The Osier soils are commonly associated on the landscape with Hosford, Hurricane, Leon, and Pottsburg soils. The Hosford soils are on the lower side slopes and are very poorly drained. The Hurricane soils are in the higher positions, have a Bh horizon, and are somewhat poorly drained. The Leon and Pottsburg soils are in the slightly higher positions and have a Bh horizon.

Typical Pedon

Osier sand; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 21 minutes 38 seconds N. and long. 84 degrees 43 minutes 56 seconds W.

- A—0 to 7 inches; dark gray (10YR 4/1) sand; salt-and-pepper appearance due to many clean sand grains; weak fine granular structure; very strongly acid; clear smooth boundary.
- Cg1—7 to 36 inches; gray (10YR 5/1) fine sand; common streaks of uncoated sand grains; single grained; loose; very strongly acid; gradual wavy boundary.
- Cg2—36 to 45 inches; light brownish gray (2.5Y 6/2) fine sand; single grained; loose; common medium distinct pale brown (10YR 6/3) masses of iron accumulation; very strongly acid; gradual wavy boundary.
- Cg3—45 to 68 inches; light brownish gray (2.5Y 6/2) fine sand; single grained; loose; many fine prominent reddish yellow (7.5YR 6/8) masses of iron accumulation; very strongly acid; gradual wavy boundary.
- Cg4—68 to 80 inches; light brownish gray (10YR 6/2) fine sand; single grained; loose; common medium prominent brownish yellow (10YR 6/8) masses of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches
Depth of sand: Greater than 80 inches
Reaction: Extremely acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 or 2
Texture—sand or fine sand

Cg horizon:

Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 1 or 2
Texture—sand or fine sand
Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Ousley Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Rapid

Parent material: Sandy alluvium

Landscape: Coastal Plain

Landform: Stream terraces on flood plains

Slope: 0 to 2 percent

Taxonomic class: Thermic, uncoated Aquic Quartzipsamments

The Ousley soils are commonly associated on the landscape with Brickyard, Chowan, Garcon, Ochlockonee, and Wahee soils. The Brickyard and Chowan soils are in the lower positions. The Brickyard soils are very poorly drained and clayey. The Chowan soils are poorly drained and have a buried layer of muck. The Garcon and Wahee soils are in positions similar to those of the Ousley soils and have a Bt horizon. The Ochlockonee soils are in the higher positions and are well drained.

Typical Pedon

Ousley sand, in an area of Garcon, Ochlockonee, and Ousley soils, occasionally flooded; in Liberty County, Florida; USGS Ward topographic quadrangle; lat. 30 degrees 22 minutes 4 seconds N. and long. 84 degrees 40 minutes 15 seconds W.

A—0 to 7 inches; very dark grayish brown (10YR 3/2) sand; weak fine granular structure; very friable; many fine and few medium roots; strongly acid; clear smooth boundary.

C1—7 to 25 inches; yellowish brown (10YR 5/4) sand; single grained; loose; few fine roots; very strongly acid; clear smooth boundary.

C2—25 to 38 inches; light yellowish brown (10YR 6/4) sand; single grained; loose; common medium distinct strong brown (7.5YR 5/6) areas of iron accumulation; common medium distinct light gray (10YR 7/2) masses of iron depletion; very strongly acid; gradual wavy boundary.

Cg1—38 to 57 inches; light gray (10YR 7/2) sand; single grained; loose; common medium prominent strong brown (7.5YR 5/6) and common fine prominent brownish yellow (10YR 6/6) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Cg2—57 to 80 inches; light gray (10YR 7/1) sand; single grained; loose; common medium prominent strong brown (7.5YR 5/6) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Very strongly acid to moderately acid throughout

A horizon:

Color—hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2

Texture—sand, fine sand, or loamy fine sand

C horizon:

Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 3 to 6

Texture—sand, fine sand, or coarse sand

Redoximorphic features—few to many areas of iron accumulation in shades of brown or yellow and masses of iron depletion in shades of gray

Cg horizon:

Color—hue of 10YR or 2.5Y, value of 6 to 8, and chroma of 1 to 2

Soil Survey of Liberty County, Florida

Texture—sand, fine sand, or coarse sand

Redoximorphic features—few or common areas of iron accumulation in shades of brown or yellow

Pamlico Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Moderate in the organic layers and rapid to slow in the mineral layers

Parent material: Residuum that weathered from organic debris over sandy sediments

Landscape: Coastal Plain

Landform: Depressions and flood plains

Slope: 0 to 1 percent

Taxonomic class: Sandy or sandy-skeletal, siliceous, dysic, thermic Terric Haplosaprists

The Pamlico soils are commonly associated on the landscape with Croatan, Dorovan, Lynn Haven, and Pickney soils. The Croatan, Dorovan, and Pickney soils are in positions similar to those of the Pamlico soils. The Croatan soils have loamy mineral horizons. The Dorovan soils have organic layers with a combined thickness of more than 51 inches. The Pickney soils are mineral soils. The Lynn Haven soils are in the slightly higher positions and are mineral soils.

Typical Pedon

Pamlico muck, in an area of Dorovan-Pamlico complex, depressional; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 18 minutes 13 seconds N. and long. 84 degrees 58 minutes 25 seconds W.

Oa1—0 to 28 inches; black (N 2.5/0) muck; 20 percent fiber unrubbed and 2 percent rubbed; massive; slightly sticky; few fine roots; extremely acid; gradual wavy boundary.

Oa2—28 to 45 inches; black (10YR 2/1) muck; 15 percent fiber unrubbed and less than 1 percent rubbed; massive; slightly sticky; extremely acid; gradual wavy boundary.

Cg—45 to 80 inches; gray (10YR 5/1) sand; single grained; loose; few lenses of very dark brown (10YR 2/2) loamy sand; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth to sand: 16 to 51 inches

Reaction: Extremely acid (by the method of 0.01 calcium chloride) in the organic layers and extremely acid to strongly acid in the underlying mineral layers

Oe horizon (where present):

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2; or neutral in hue and value of 2

Texture—mucky peat; 50 to 90 percent fiber unrubbed and 25 to 60 percent rubbed

Oa horizon:

Color—hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2; or neutral in hue and value of 2

Texture—muck; 10 to 30 percent fiber unrubbed and less than 10 percent rubbed

Cg horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 or 2

Texture—sand, fine sand, loamy fine sand, or loamy sand

Pantego Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Moderate

Parent material: Loamy marine sediments

Landscape: Coastal Plain

Landform: Depressions

Slope: 0 to 1 percent

Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Umbric Paleaquults

The Pantego soils are commonly associated on the landscape with Croatan, Goldhead, Meadowbrook, and Surrency soils. The Croatan and Surrency soils are in positions similar to those of the Pantego soils. The Croatan soils have an organic surface layer that is 16 to 51 inches thick. The Surrency soils have a Bt horizon at a depth of 20 to 40 inches. The Goldhead and Meadowbrook soils are in the slightly higher positions, do not have an umbric epipedon, and are poorly drained.

Typical Pedon

Pantego fine sandy loam, in an area of Surrency, Pantego, and Croatan soils, depressional; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 18 minutes 24 seconds N. and long. 84 degrees 59 minutes 11 seconds W.

A—0 to 16 inches; very dark gray (10YR 3/1) fine sandy loam; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

Btg1—16 to 36 inches; dark gray (10YR 4/1) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent brownish yellow (10YR 6/8) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2—36 to 56 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent brownish yellow (10YR 6/8) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg3—56 to 80 inches; light gray (10YR 7/1) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent brownish yellow (10YR 6/8) and yellow (10YR 8/6) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—loamy fine sand, fine sandy loam, loamy sand, sandy loam, or their mucky analogs

Btg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sandy loam, sandy clay loam, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sandy loam, sandy clay loam, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown or yellow

Pelham Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods, flats, and depressions

Slope: 0 to 2 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Arenic Paleaquults

The Pelham soils are commonly associated on the landscape with Plummer, Sapelo, and Scranton soils. The associated soils are in positions similar to those of the Pelham soils. The Plummer soils have a Bt horizon at a depth of 40 to 80 inches. The Sapelo soils have a Bh horizon. The Scranton soils do not have a Bt horizon.

Typical Pedon

Pelham loamy sand; in Liberty County, Florida; USGS Sumatra topographic quadrangle; lat. 30 degrees 1 minute 17 seconds N. and long. 84 degrees 59 minutes 41 seconds W.

A—0 to 7 inches; very dark brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; very strongly acid; clear smooth boundary.

Eg1—7 to 14 inches; grayish brown (10YR 5/2) loamy fine sand; single grained; loose; very strongly acid; gradual wavy boundary.

Eg2—14 to 31 inches; light brownish gray (10YR 6/2) loamy fine sand; single grained; loose; few medium faint brown (10YR 5/3) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Eg3—31 to 37 inches; light gray (10YR 6/1) loamy fine sand; single grained; loose; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg1—37 to 48 inches; light gray (10YR 7/1) sandy clay loam; weak medium subangular blocky structure; firm; common medium prominent brownish yellow (10YR 6/8) areas of iron accumulation; strongly acid; gradual wavy boundary.

Btg2—48 to 80 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; firm; common medium prominent yellowish red (5YR 5/6) and few medium prominent yellowish brown (10YR 5/6) areas of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or loamy fine sand

Eg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or loamy fine sand

Soil Survey of Liberty County, Florida

Redoximorphic features (where present)—few to many iron accumulations in shades of brown and yellow

BEg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—fine sandy loam or sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown and yellow

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or neutral in hue and value of 5 to 7

Texture—dominantly sandy loam or sandy clay loam but ranges to sandy clay in the lower part of the horizon in some pedons

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 3 to 7, and chroma of 1 or 2

Texture—sandy loam, loamy sand, or sand

Redoximorphic features—few to many iron accumulations in shades of brown and yellow

Pickney Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Rapid

Parent material: Sandy marine or alluvial sediments

Landscape: Coastal Plain

Landform: Flood plains

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Cumulic Humaquepts

The Pickney soils are commonly associated on the landscape with Croatan, Dorovan, Lynn Haven, and Pamlico soils. The Croatan, Dorovan, and Pamlico soils are in positions similar to those of the Pickney soils and are organic soils. The Lynn Haven soils are in the slightly higher positions, have a Bh horizon, and are poorly drained.

Typical Pedon

Pickney mucky fine sand, in an area of Pickney, Dorovan, and Bibb soils, frequently flooded; in Liberty County, Florida; USGS Telogia topographic quadrangle; lat. 30 degrees 22 minutes 2 seconds N. and long. 84 degrees 50 minutes 52 seconds W.

A1—0 to 27 inches; black (10YR 2/1) mucky fine sand; weak fine granular structure; friable; common clean sand grains; few fine roots; extremely acid; gradual wavy boundary.

A2—27 to 40 inches; black (10YR 2/1) fine sand; weak fine granular structure; very friable; common clean sand grains; extremely acid; gradual wavy boundary.

Cg1—40 to 47 inches; dark grayish brown (2.5Y 4/2) fine sand; single grained; loose; common clean sand grains; very strongly acid; gradual wavy boundary.

Cg2—47 to 70 inches; grayish brown (2.5Y 5/2) fine sand; single grained; loose; strongly acid; gradual wavy boundary.

Cg3—70 to 80 inches; gray (2.5Y 6/1) fine sand; single grained; loose; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout

A horizon:

Color—hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 1 or 2

Texture—sand, fine sand, loamy sandy, loamy fine sand, or their mucky analogs

Cg horizon:

Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sand, fine sand, loamy sandy, or loamy fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Plummer Series

Depth class: Very deep

Drainage class: Poorly drained and very poorly drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods, flats, and depressions

Slope: 0 to 5 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Grossarenic Paleaquults

The Plummer soils are commonly associated on the landscape with Pelham, Sapelo, and Scranton soils. The associated soils are in positions similar to those of the Plummer soils. The Pelham soils have a Bt horizon at a depth of 20 to 40 inches. The Sapelo soils have a Bh horizon. The Scranton soils do not have a Bt horizon.

Typical Pedon

Plummer sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Bloxham topographic quadrangle; lat. 30 degrees 23 minutes 2 seconds N. and long. 84 degrees 43 minutes 11 seconds W.

Ap—0 to 10 inches; black (10YR 2/1) sand; weak fine granular structure; very friable; very strongly acid; abrupt wavy boundary.

Eg1—10 to 46 inches; gray (10YR 5/1) sand; single grained; loose; very strongly acid; gradual wavy boundary.

Eg2—46 to 55 inches; gray (10YR 5/1) loamy sand; weak medium subangular blocky structure; friable; very strongly acid; clear wavy boundary.

Btg1—55 to 64 inches; light gray (10YR 6/1) sandy loam; weak coarse subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2—64 to 80 inches; light gray (N 7/0) sandy clay loam; weak coarse subangular blocky structure; firm; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2

Texture—sand, fine sand, or loamy fine sand

Soil Survey of Liberty County, Florida

Eg horizon:

- Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
- Texture—sand, fine sand, loamy sand, or loamy fine sand
- Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow

Btg horizon:

- Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or neutral in hue and value of 5 to 7
- Texture—sandy loam, fine sandy loam, or sandy clay loam
- Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Pottsburg Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Grossarenic Alaquods

The Pottsburg soils are commonly associated on the landscape with Chipley, Hosford, Hurricane, Leon, and Osier soils. The Chipley and Hurricane soils are in the slightly higher positions and are somewhat poorly drained. Also, the Chipley soils do not have a Bh horizon. The Hosford soils are in the lower positions, do not have a Bh horizon, and are very poorly drained. The Leon and Osier soils are in positions similar to those of the Pottsburg soils. The Leon soils have a Bh horizon at a depth of 20 to 30 inches. The Osier soils do not have a Bh horizon.

Typical Pedon

Pottsburg sand; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 19 minutes 33 seconds N. and long. 84 degrees 56 minutes 45 seconds W.

- A1—0 to 2 inches; very dark gray (10YR 3/1) sand; weak fine granular structure; very friable; moderately acid; clear smooth boundary.
- A2—2 to 8 inches; dark grayish brown (10YR 4/2) fine sand; single grained; loose; strongly acid; gradual smooth boundary.
- E1—8 to 22 inches; light brownish gray (10YR 6/2) fine sand; single grained; loose; few fine prominent strong brown (7.5YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.
- E2—22 to 50 inches; pale yellow (2.5Y 8/2) fine sand; single grained; loose; common medium prominent strong brown (7.5YR 5/8) masses of iron accumulation; strongly acid; gradual wavy boundary.
- E3—50 to 57 inches; brown (7.5YR 5/2) fine sand; single grained; loose; common medium distinct brownish yellow (10YR 6/6) masses of iron accumulation; moderately acid; clear smooth boundary.
- Bh1—57 to 67 inches; brown (7.5YR 4/2) fine sand; common medium distinct black (5YR 2.5/1) bodies; weak fine granular structure; very friable; strongly acid; gradual wavy boundary.
- Bh2—67 to 80 inches; black (5YR 2.5/1) fine sand; weak fine granular structure; very friable; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR, value of 2 to 5, and chroma of 1 or 2

Texture—sand or fine sand

E horizon (upper part):

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 to 3

Texture—sand or fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown, red, or yellow

E horizon (lower part):

Color—hue of 7.5YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2

Texture—sand or fine sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray or olive

Bh horizon:

Color—hue of 5YR, value of 2.5 to 4, and chroma of 1 to 4; or hue of 7.5YR, value of 3 to 5, and chroma of 1 to 3

Texture—sand, fine sand, loamy sand, or loamy fine sand

Rains Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Parent material: Loamy marine sediments

Landscape: Coastal Plain

Landform: Flats

Slope: 0 to 2 percent

Taxonomic class: Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults

The Rains soils are commonly associated on the landscape with Bladen, Leefield, Lynchburg, and Woodington soils. The Bladen and Woodington soils are in positions similar to those of the Rains soils. The Bladen soils have more than 35 percent clay in the Bt horizon. The Woodington soils have less than 18 percent clay in the Bt horizon. The Leefield and Lynchburg soils are in the higher positions and are somewhat poorly drained.

Typical Pedon

Rains sandy loam, in an area of Rains and Bladen soils; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 3 minutes 8 seconds N. and long. 85 degrees 1 minute 49 seconds W.

A—0 to 4 inches; dark grayish brown (10YR 4/2) sandy loam; weak fine granular structure; very friable; strongly acid; clear wavy boundary.

Eg—4 to 13 inches; grayish brown (10YR 5/2) sandy loam; weak fine granular structure; very friable; few fine distinct brown (10YR 5/3) areas of iron accumulation; very strongly acid; clear wavy boundary.

Soil Survey of Liberty County, Florida

Btg1—13 to 35 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; common medium distinct yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2—35 to 65 inches; light gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; common medium distinct yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) areas of iron accumulation; very strongly acid; gradual wavy boundary.

BCg—65 to 80 inches; light gray (10YR 6/1) sandy clay; moderate medium subangular blocky structure; firm; few fine and medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2

Texture—sand, loamy sand, loamy fine sand, sandy loam, or fine sandy loam

Eg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sand, loamy sand, loamy fine sand, sandy loam, or fine sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown and yellow

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2

Texture—sandy clay loam or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

BCg horizon (where present):

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sandy loam, sandy clay loam, or sandy clay

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sandy clay loam, sandy clay, loamy sand, or sand

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow

Rutlege Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Rapid

Parent material: Sandy marine or alluvial sediments

Landscape: Coastal Plain

Landform: Depressions and flood plains

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Typic Humaquepts

Soil Survey of Liberty County, Florida

The Rutlege soils are commonly associated on the landscape with Bibb, Ellore, and Meggett soils. The associated soils are in the slightly higher positions and are poorly drained. Also, the Ellore and Meggett soils have a Bt horizon.

Typical Pedon

Rutlege fine sand, in an area of Rutlege and Plummer soils, depressional; in Liberty County, Florida; USGS Telogia topographic quadrangle; lat. 30 degrees 21 minutes 3 seconds N. and long. 84 degrees 48 minutes 22 seconds W.

- A—0 to 12 inches; black (10YR 2/1) fine sand; weak fine granular structure; very friable; few fine roots; very strongly acid; gradual smooth boundary.
Cg1—12 to 30 inches; dark gray (10YR 4/1) fine sand; single grained; loose; very strongly acid; gradual wavy boundary.
Cg2—30 to 60 inches; gray (10YR 5/1) fine sand; single grained; loose; very strongly acid; gradual wavy boundary.
Cg3—60 to 80 inches; light gray (10YR 6/1) fine sand; single grained; loose; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Extremely acid to strongly acid throughout

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, loamy fine sand, or their mucky analogs

Cg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—sand, fine sand, loamy fine sand, or loamy sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Sapelo Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods

Slope: 0 to 2 percent

Taxonomic class: Sandy, siliceous, thermic Ultic Alaquods

The Sapelo soils are commonly associated on the landscape with Pelham, Plummer, and Scranton soils. The Pelham and Plummer soils are in the slightly lower positions and do not have a Bh horizon. The Scranton soils are in positions similar to those of the Sapelo soils and do not have Bh and Bt horizons.

Typical Pedon

Sapelo sand; in Liberty County, Florida; USGS Kennedy Creek topographic quadrangle; lat. 30 degrees 2 minutes 2 seconds N. and long. 85 degrees 3 minutes 4 seconds W.

- A—0 to 5 inches; black (10YR 2/1) sand; weak fine granular structure; very friable; very strongly acid; clear smooth boundary.

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- E—5 to 12 inches; light brownish gray (10YR 6/2) sand; single grained; loose; very strongly acid; abrupt irregular boundary.
- Bh—12 to 17 inches; reddish brown (2.5YR 4/4) sand; weak fine granular structure; very friable; very strongly acid; gradual wavy boundary.
- E¹—17 to 40 inches; pale brown (10YR 6/3) sand; single grained; loose; few medium distinct yellowish brown (10YR 5/6) areas of iron accumulation; common medium faint light brownish gray (10YR 6/2) areas of iron depletion; very strongly acid; smooth irregular boundary.
- E/Bh—40 to 51 inches; yellowish brown (10YR 5/4) sand; single grained; loose; very strongly acid; gradual wavy boundary.
- Btg—51 to 80 inches; light gray (10YR 6/2) sandy loam; weak fine subangular blocky structure; very friable; few medium distinct brownish yellow (10YR 6/6) and common medium faint grayish brown (10YR 5/2) and dark grayish brown (10YR 4/2) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2; salt-and-pepper appearance in some pedons due to organic matter and clean sand grains

Texture—sand or fine sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2

Texture—sand or fine sand

Bh horizon:

Color—hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 to 4

Texture—sand, fine sand, or loamy fine sand

E¹ horizon (where present):

Color—hue of 10YR, value of 5 to 8, and chroma of 1 to 4

Texture—sand or fine sand

Redoximorphic features (where present)—few or common masses of iron depletion in shades of gray

E part of the E/Bh horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2

Texture—sand or fine sand

Bh part of the E/Bh horizon (where present):

Color—hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 to 4

Texture—sand, fine sand, or loamy fine sand

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2

Texture—sandy loam, fine sandy loam, sandy clay loam, or clay loam with lenses of sand or clay in some pedons

Redoximorphic features—few or common masses of iron accumulations in shades of brown, red, or yellow

Scranton Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Rapid

Parent material: Sandy marine sediments

Landscape: Coastal Plain

Landform: Flatwoods and sloughs

Slope: 0 to 2 percent

Taxonomic class: Siliceous, thermic Humaqueptic Psammaquents

The Scranton soils are commonly associated on the landscape with Pelham, Plummer, and Sapelo soils. The Pelham and Plummer soils are in positions similar to those of the Scranton soils and have a Bt horizon. The Sapelo soils are in the slightly higher positions and have Bh and Bt horizons.

Typical Pedon

Scranton loamy sand, slough; in Liberty County, Florida; USGS Owens Bridge topographic quadrangle; lat. 30 degrees 6 minutes 25 seconds N. and long. 84 degrees 51 minutes 20 seconds W.

- A1—0 to 9 inches; black (2.5Y 2.5/1) loamy sand; weak fine granular structure; very friable; many fine and medium roots; few fine gray (2.5Y 5/1) stripped sand grains; very strongly acid; gradual smooth boundary.
- A2—9 to 18 inches; dark gray (2.5Y 4/1) fine sand; weak fine granular structure; very friable; many fine and medium roots; few fine gray (2.5Y 5/1) stripped sand grains; few fine distinct dark olive brown (2.5Y 3/3) areas of iron accumulation; very strongly acid; clear smooth boundary.
- Cg1—18 to 23 inches; dark grayish brown (2.5Y 4/2) fine sand; single grained; loose; many fine roots; few fine distinct olive brown (2.5Y 4/4) areas of iron accumulation; very strongly acid; gradual smooth boundary.
- Cg2—23 to 37 inches; grayish brown (2.5Y 5/2) fine sand; single grained; loose; few fine roots; few medium distinct light olive brown (2.5Y 5/4) masses of iron accumulation; few fine distinct dark yellowish brown (10YR 4/4) nodules of iron and manganese accumulation; very strongly acid; gradual smooth boundary.
- Cg3—37 to 62 inches; 40 percent brownish yellow (10YR 6/6), 30 percent dark grayish brown (2.5Y 4/2), 20 percent yellowish brown (10YR 5/6), and 10 percent dark yellowish brown (10YR 4/4) fine sand; single grained; loose; few fine roots; the areas of brownish yellow, yellowish brown, and dark yellowish brown are iron accumulations; the areas of dark grayish brown are iron depletions; very strongly acid; gradual wavy boundary.
- Cg4—62 to 80 inches; 30 percent dark grayish brown (2.5Y 4/2), 30 percent brown (10YR 4/3), 30 percent grayish brown (10YR 5/2), and 10 percent very dark brown (10YR 4/4) fine sand; single grained; loose; the areas of brown and very dark brown are iron accumulations; the areas of dark grayish brown and grayish brown are iron depletions; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Greater than 80 inches

Reaction: Very strongly acid or strongly acid in the surface horizons, except where lime has been applied, and very strongly acid to moderately acid throughout the remainder of the profile

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A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2; or neutral in hue and value of 2 or 3

Texture—sand, fine sand, loamy sand, or loamy fine sand

Cg horizon (upper part):

Color—hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 or 2; or neutral in hue and value of 4 or 5

Texture—sand, fine sand, or loamy sand

Redoximorphic features—few to many iron accumulations in shades of brown and yellow

Cg horizon (lower part):

Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2; or neutral in hue and value of 5 to 8

Texture—sand, fine sand, or loamy sand

Redoximorphic features—few to many iron accumulations in shades of brown and yellow and areas of iron depletion in shades of gray

Stilson Series

Depth class: Very deep

Drainage class: Moderately well drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Marine terraces

Slope: 0 to 3 percent

Taxonomic class: Loamy, siliceous, subactive, thermic Arenic Plinthic Paleudults

The Stilson soils are commonly associated on the landscape with Albany, Blanton, Dothan, Fuquay, and Goldsboro soils. The Albany soils are in the lower positions and are somewhat poorly drained. The Blanton, Dothan, and Goldsboro soils are in positions similar to those of the Stilson soils. The Blanton soils have a Bt horizon at a depth of 40 to 80 inches. The Dothan and Goldsboro soils have a Bt horizon at a depth of less than 20 inches. The Fuquay soils are in the slightly higher positions and are well drained.

Typical Pedon

Stilson fine sand, 0 to 3 percent slopes; in Liberty County, Florida; USGS Bristol topographic quadrangle; lat. 30 degrees 25 minutes 35 seconds N. and long. 84 degrees 57 minutes 19 seconds W.

Ap—0 to 6 inches; dark grayish brown (10YR 4/2) fine sand; single grained; loose; very strongly acid; abrupt smooth boundary.

E—6 to 26 inches; light brownish gray (10YR 6/2) sand; single grained; loose; very strongly acid; clear wavy boundary.

Bt1—26 to 30 inches; yellowish brown (10YR 5/8) sandy loam; weak medium subangular blocky structure; very friable; few ironstone nodules; very strongly acid; gradual wavy boundary.

Bt2—30 to 38 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; common fine and medium prominent light gray (10YR 7/2) areas of iron depletion; few ironstone nodules; very strongly acid; gradual wavy boundary.

Btv1—38 to 62 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; about 10 percent, by volume,

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nodular plinthite; common medium prominent light brownish gray (10YR 6/2) and common coarse prominent light gray (10YR 7/2) areas of iron depletion; very strongly acid; gradual wavy boundary.

Btv2—62 to 80 inches; olive yellow (2.5Y 6/8) sandy clay loam; moderate medium subangular blocky structure; friable; about 12 percent, by volume, nodular plinthite; many coarse prominent light gray (10YR 7/2) and light brownish gray (10YR 6/2) areas of iron depletion; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Very strongly acid to moderately acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 to 3

Texture—sand or loamy sand

E horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 2 to 6

Texture—sand, fine sand, or loamy sand

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 8

Texture—sandy loam or sandy clay loam

Redoximorphic features (where present)—few or common areas of iron accumulation in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Btv horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 8; or multicolored in shades of brown, gray, olive, red, or yellow

Texture—sandy clay loam

Redoximorphic features—few to many areas of iron accumulation in shades of brown, red, or yellow and masses of iron depletion in shades of gray; 5 to 32 percent plinthite

BC horizon (where present):

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 7

Texture—sandy loam or sandy clay loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown, red, or yellow and masses of iron depletion in shades of gray

Surrency Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Moderate or moderately slow

Parent material: Loamy marine and fluvial sediments

Landscape: Coastal Plain

Landform: Depressions and flood plains

Slope: 0 to 1 percent

Taxonomic class: Loamy, siliceous, semiactive, thermic Arenic Umbric Paleaquults

The Surrency soils are commonly associated on the landscape with Croatan, Goldhead, Meadowbrook, and Pantego soils. The Croatan and Pantego soils are in positions similar to those of the Surrency soils. The Croatan soils have an organic

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surface layer that is 16 to 51 inches thick. The Pantego soils have a Bt horizon at a depth of less than 20 inches. The Goldhead and Meadowbrook soils are in the slightly higher positions and do not have an umbric epipedon.

Typical Pedon

Surrency loamy sand, in an area of Surrency, Pantego, and Croatan soils, depressional; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 18 minutes 24 seconds N. and long. 84 degrees 59 minutes 2 seconds W.

A—0 to 13 inches; black (10YR 2/1) loamy sand; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

Eg—13 to 27 inches; gray (10YR 5/1) sand; single grained; loose; very strongly acid; clear smooth boundary.

Btg1—27 to 44 inches; grayish brown (10YR 5/2) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent brownish yellow (10YR 6/8) areas of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2—44 to 80 inches; light gray (10YR 7/1) sandy loam; weak medium subangular blocky structure; very friable; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 20 to 40 inches

Reaction: Extremely acid to strongly acid throughout

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—sand, fine sand, loamy fine sand, loamy sand, or their mucky analogs

Eg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sand, fine sand, loamy sand, or loamy fine sand

Redoximorphic features (where present)—few or common iron accumulations in shades of brown or yellow

Btg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sandy loam, sandy clay loam, or fine sandy loam

Redoximorphic features—common or many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 8, and chroma of 1 or 2

Texture—loamy fine sand, fine sandy loam, or sandy clay loam

Redoximorphic features—common or many iron accumulations in shades of brown or yellow

Torhunta Series

Depth class: Very deep

Drainage class: Very poorly drained

Permeability: Moderately rapid

Parent material: Loamy marine or alluvial sediments

Landscape: Coastal Plain

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Landform: Flood plains

Slope: 0 to 2 percent

Taxonomic class: Coarse-loamy, siliceous, active, acid, thermic Typic Humaquepts

The Torhunta soils are commonly associated on the landscape with Croatan and Lynn Haven soils. The Croatan soils are in positions similar to those of Torhunta soils and are organic soils. The Lynn Haven soils are in the slightly higher positions, have a Bh horizon, and are poorly drained.

Typical Pedon

Torhunta fine sandy loam, in an area of Torhunta-Lynn Haven-Croatan complex, frequently flooded; in Liberty County, Florida; USGS Thousand Yard Bay topographic quadrangle; lat. 30 degrees 2 minutes 38 seconds N. and long. 84 degrees 42 minutes 59 seconds W.

A—0 to 13 inches; black (10YR 2/1) fine sandy loam; weak medium granular structure; very friable; few fine roots; very strongly acid; gradual smooth boundary.

Bg—13 to 35 inches; dark gray (10YR 4/1) fine sandy loam; weak fine subangular blocky structure; very friable; few sand pockets; very strongly acid; gradual wavy boundary.

Cg1—35 to 52 inches; gray (10YR 5/1) sand; single grained; loose; very strongly acid; gradual wavy boundary.

Cg2—52 to 80 inches; light gray (10YR 6/1) sand; single grained; loose; very strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Reaction: Extremely acid to strongly acid throughout

A horizon:

Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2

Texture—loamy sand, fine sandy loam, sandy loam, or their mucky analogs

Bg horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 1 or 2

Texture—fine sandy loam or sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Cg horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2

Texture—sand, loamy fine sand, sandy loam, or loamy sand

Redoximorphic features (where present)—few to many iron accumulations in shades of brown or yellow

Troup Series

Depth class: Very deep

Drainage class: Somewhat excessively drained

Permeability: Moderate

Parent material: Sandy and loamy marine sediments

Landscape: Coastal Plain uplands

Landform: Hills, ridges, and hillslopes

Slope: 0 to 8 percent

Taxonomic class: Loamy, kaolinitic, thermic Grossarenic Kandiodults

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The Troup soils are commonly associated on the landscape with Alpin, Centenary, Foxworth, and Lakeland soils. The Alpin and Lakeland soils are in the slightly higher positions and do not have a Bt horizon. The Centenary and Foxworth soils are in positions similar to those of the Troup soils and do not have a Bt horizon.

Typical Pedon

Troup sand, 0 to 5 percent slopes; in Liberty County, Florida; USGS Woods topographic quadrangle; lat. 30 degrees 22 minutes 29 seconds N. and long. 84 degrees 59 minutes 12 seconds W.

Ap—0 to 5 inches; dark grayish brown (10YR 4/2) sand; weak fine granular structure; very friable; moderately acid; abrupt smooth boundary.

E1—5 to 35 inches; yellowish brown (10YR 5/4) sand; single grained; loose; moderately acid; gradual wavy boundary.

E2—35 to 60 inches; strong brown (7.5YR 5/8) loamy sand; weak fine subangular blocky structure; very friable; strongly acid; gradual wavy boundary.

Bt—60 to 80 inches; yellowish red (5YR 5/8) sandy loam; weak coarse subangular blocky structure; friable; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: 40 to 80 inches

Reaction: Very strongly acid to moderately acid throughout, except 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—sand, fine sand, or loamy fine sand

E horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 8, and chroma of 4 to 8; few to common clean grains in some pedons

Texture—sand, fine sand, or loamy sand

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 5 to 7, and chroma of 4 to 8

Texture—sandy loam, fine sandy loam, or sandy clay loam

Wahee Series

Depth class: Very deep

Drainage class: Somewhat poorly drained

Permeability: Slow

Parent material: Clayey marine or alluvial sediments

Landscape: Coastal Plain

Landform: Stream terraces

Slope: 0 to 3 percent

Taxonomic class: Fine, mixed, semiactive, thermic Aeric Endoaquults

The Wahee soils are commonly associated on the landscape with Brickyard, Chowan, Garcon, Ochlockonee, and Ousley soils. The Brickyard and Chowan soils are in the lower positions and are very poorly drained or poorly drained. The Garcon and Ousley soils are in positions similar to those of the Wahee soils. The Garcon soils have a Bt horizon at a depth of 20 to 40 inches. The Ousley soils do not have a Bt horizon. The Ochlockonee soils are in the higher positions and are well drained.

Typical Pedon

Wahee sandy loam, in an area of Wahee and Ochlockonee soils, 0 to 3 percent slopes, frequently flooded; in Liberty County, Florida; USGS Orange topographic quadrangle; lat. 30 degrees 11 minutes 35 seconds N. and long. 85 degrees 6 minutes 45 seconds W.

A—0 to 6 inches; light olive brown (2.5Y 5/3) sandy loam; weak fine granular structure; very friable; many fine and medium roots; very strongly acid; clear smooth boundary.

E—6 to 14 inches; brown (10YR 5/3) fine sandy loam; weak fine granular structure; very friable; many fine and few medium roots; very strongly acid; clear wavy boundary.

Bt—14 to 19 inches; yellowish brown (10YR 5/6) sandy clay; strong medium subangular blocky structure; firm; few fine roots; common medium prominent light brownish gray (10YR 6/2) areas of iron depletion; extremely acid; gradual wavy boundary.

Btg1—19 to 36 inches; gray (10YR 5/1) clay; strong medium subangular blocky structure; very firm; common medium prominent yellowish brown (10YR 5/8) areas of iron accumulation; extremely acid; gradual wavy boundary.

Btg2—36 to 80 inches; gray (10YR 5/1) sandy clay; strong medium subangular blocky structure; very firm; common large prominent yellowish brown (10YR 5/8) areas of iron accumulation; extremely acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Very strongly acid to moderately acid in the A horizon and extremely acid to strongly acid throughout the remainder of the profile

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 to 3

Texture—sandy loam, fine sandy loam, loam, silt loam, or loamy sand

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 4

Texture—sandy loam, fine sandy loam, loam, silt loam, or loamy sand

Redoximorphic features (where present)—few iron accumulations in shades of brown or yellow and iron depletions in shades of gray

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 8

Texture—clay, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow and iron depletions in shades of gray

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—clay, sandy clay, or clay loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—stratified or variable sandy to clayey materials

Redoximorphic features—few to many iron accumulations in shades of brown, red, and yellow

Woodington Series

Depth class: Very deep

Drainage class: Poorly drained

Permeability: Moderately rapid

Parent material: Loamy marine sediments

Landscape: Coastal Plain

Landform: Flats

Slope: 0 to 2 percent

Taxonomic class: Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults

The Woodington soils are commonly associated on the landscape with Bladen, Leefield, Lynchburg, and Rains soils. The Bladen and Rains soils are in positions similar to those of the Woodington soils. The Bladen soils have more than 35 percent clay in the Bt horizon. The Rains soils have 18 to 35 percent clay in the Bt horizon. The Leefield and Lynchburg soils are in the higher positions and are somewhat poorly drained.

Typical Pedon

Woodington loamy sand; in Liberty County, Florida; USGS Sumatra topographic quadrangle; lat. 30 degrees 1 minute 47 seconds N. and long. 84 degrees 53 minutes 11 seconds W.

A—0 to 3 inches; dark gray (10YR 4/1) loamy sand; weak fine granular structure; very friable; very strongly acid; clear smooth boundary.

E—3 to 13 inches; gray (10YR 5/1) fine sandy loam; weak fine granular structure; friable; common fine prominent yellowish brown (10YR 5/8) areas of iron accumulation along root channel pores; very strongly acid; diffuse wavy boundary.

Btg1—13 to 48 inches; gray (10YR 5/1) fine sandy loam; weak medium subangular blocky structure; friable; many fine prominent strong brown (7.5YR 5/8) areas of iron accumulation; strongly acid; gradual wavy boundary.

Btg2—48 to 65 inches; gray (10YR 5/1) fine sandy loam; weak fine subangular blocky structure; friable; few fine prominent yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) areas of iron accumulation; strongly acid; diffuse wavy boundary.

Btg3—65 to 80 inches; gray (N 5/0) fine sandy loam; weak fine subangular blocky structure; friable; few medium prominent yellow (10YR 7/8) areas of iron accumulation; strongly acid.

Range in Characteristics

Depth to bedrock: Greater than 80 inches

Depth of sand: Less than 20 inches

Reaction: Extremely acid to strongly acid throughout, except where lime has been applied

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2

Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam

E horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2

Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam

Redoximorphic features (where present)—few to many iron accumulations in shades of brown and yellow

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Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2; or neutral in hue and value of 5 or 6

Texture—sandy loam or fine sandy loam

Redoximorphic features—few to many iron accumulations in shades of brown, red, or yellow

Cg horizon (where present):

Color—multicolored in shades of brown, gray, red, and yellow

Texture—loamy sand, loamy fine sand, or sand

Formation of the Soils

In this section, the factors and processes of soil formation are described and related to the soils in the survey area. Also, the geology of the county is described.

Factors of Soil Formation

Soil is produced by forces of weathering acting on parent material deposited or accumulated by geologic agencies. The kind of soil that develops depends on five major factors. These factors are the type of parent material; the climate under which soil material has existed since accumulation; the plant and animal life in and on the soil; the relief, or lay of the land; and the length of time the forces of soil formation have acted on the soil material (Jenny, 1941).

The five soil-forming factors are interdependent; each modifies the effect of the others. Any one of the five factors can have more influence than the others on the formation of a soil and can account for most of its properties. For example, if the parent material is quartz sand, the soil generally has weakly expressed horizons. In places, the effect of the parent material is modified greatly by the effects of climate, relief, and plants and animals. As a soil forms, it is influenced by each of the five factors, but in places one factor may be dominant. A modification or variation in any of the five factors results in a different kind of soil.

Parent Material

Parent material is the unconsolidated mass in which a soil forms. It determines the limits of the chemical and mineralogical composition of the soil. In Liberty County, the parent material consists of beds of sandy and clayey materials that were transported and deposited by ocean currents. The ocean covered the area a number of times during the Pleistocene period. In some parts of the county, depressions contain organic material from decomposed plant remains.

Climate

The climate of Liberty County is generally warm and humid. Few differences between the soils are caused by climate. The climate is favorable for the rapid decomposition of organic matter and hastens chemical reactions in the soil. Heavy rainfall leaches the soils of most plant nutrients and produces an acid condition in many of the sandy soils. It also carries the less soluble fine particles downward. Because of the climatic conditions, many of the soils in the county have a low content of organic matter, low natural fertility, and low available water capacity.

Plants and Animals

Plants have been the principal biological factor in the formation of soils in the county. Animals, insects, bacteria, and fungi have also been important. Plants and animals furnish organic matter to the soil and bring nutrients from lower soil layers to

upper soil layers. In places, plants and animals cause differences in the amount of organic matter, nitrogen, and nutrients in the soil and differences in soil porosity and structure. For example, crayfish penetrate different layers of soil, thereby mixing loamy layers with sandy layers.

Microorganisms, including bacteria and fungi, help to weather and break down minerals and to decompose organic matter. These organisms are most numerous in the upper few inches of the soil. Earthworms and other small animals that inhabit the soil alter its physical and chemical composition and mix the soil material.

Relief

In Liberty County, relief has affected the formation of soils primarily through its influence on soil-water relationships. The three general areas of relief in the county are flatwoods, elevated knolls and ridges, and depressions and flood plains. Differences between the soils, which all formed in similar parent materials, are directly related to relief. In areas of the flatwoods, the water table is at a shallow depth and the soils are periodically saturated to the surface. These soils display less leaching and greater retention of organic matter than the soils in the other areas. The soils on the elevated knolls and ridges have a greater depth to the water table. They are highly leached and have less organic matter. The soils in depressions have a medium to high content of organic matter.

Time

Time is an important factor affecting soil formation. The physical and chemical changes brought about by climate, living organisms, and relief are relatively slow. The length of time needed to convert geological material into soil varies according to the nature of the material and the interaction of the other soil-forming factors. Some basic minerals from which soils are formed weather fairly rapidly, while others are chemically inert and show little change over time. Within the soil, the translocation of fine particles to form horizons varies under differing conditions, but the processes take a relatively long period of time.

Processes of Soil Formation

Soil genesis refers to the formation of soil horizons. The differentiation of soil horizons in Liberty County is the result of accumulation of organic matter, leaching of carbonates, reduction and transfer of iron, or accumulation of silicate clay minerals. In places, more than one of these processes is involved. Some organic matter has accumulated in the upper layers of most of the soils. The content of organic matter is low in some of the soils and fairly high in others.

The soils in the county are leached to varying degrees. Carbonates and salts have been leached in most of the soils. Because the leaching permitted the subsequent translocation of silicate clay materials in some soils, the effects have been indirect. The reduction and transfer of iron have occurred in most of the soils in the county, except in the organic soils. In some of the wet soils, iron in the subsoil forms yellowish brown horizons and redoximorphic features (mottles).

Geology

Frank R. Rupert, professional geologist, Florida Geological Survey, prepared this section.

This overview of the geology of Liberty County includes sections on *geomorphology*, describing the shape and origin of the land surface; *stratigraphy*, describing the underlying rock strata; *ground water*, providing an overview of the

aquifer systems; and *mineral resources*, summarizing the mining potential of the principal mineral resources.

Geomorphology

The modern land surface of Liberty County is a product of fluvial and marine depositions during prehistoric periods when sea levels were higher than present. The current landscape was produced by subsequent erosion from marine currents and waves and by later down-cutting from freshwater streams that formed terraces and incised stream valleys and ravines. The county may be divided into two broad geomorphic districts, each with subzones based on elevation and shape of the land surface. The broad districts are the Tifton Uplands District and the Apalachicola Delta District. Figure 13 illustrates the geomorphic zones in the county.

Tifton Uplands District

The northern part of Liberty County is within topographically high, broadly-rolling, stream-dissected uplands. These uplands extend from the Alapaha River (located about 90 miles to the east in Hamilton County) westward to the Apalachicola River (at the western edge of Liberty County). Cooke (1939) and White et al. (1964) referred to this region as the Tallahassee Hills. Brooks (1981) and Scott (in preparation) applied the name Tifton Uplands District to the regional highlands in southern Georgia and the northern Florida panhandle. The portion of the Tifton Uplands District in Liberty County is divided into two subzones based on the character of the topography: the Apalachicola Bluffs and Ravines and the Tallahassee Hills (Scott, in preparation).

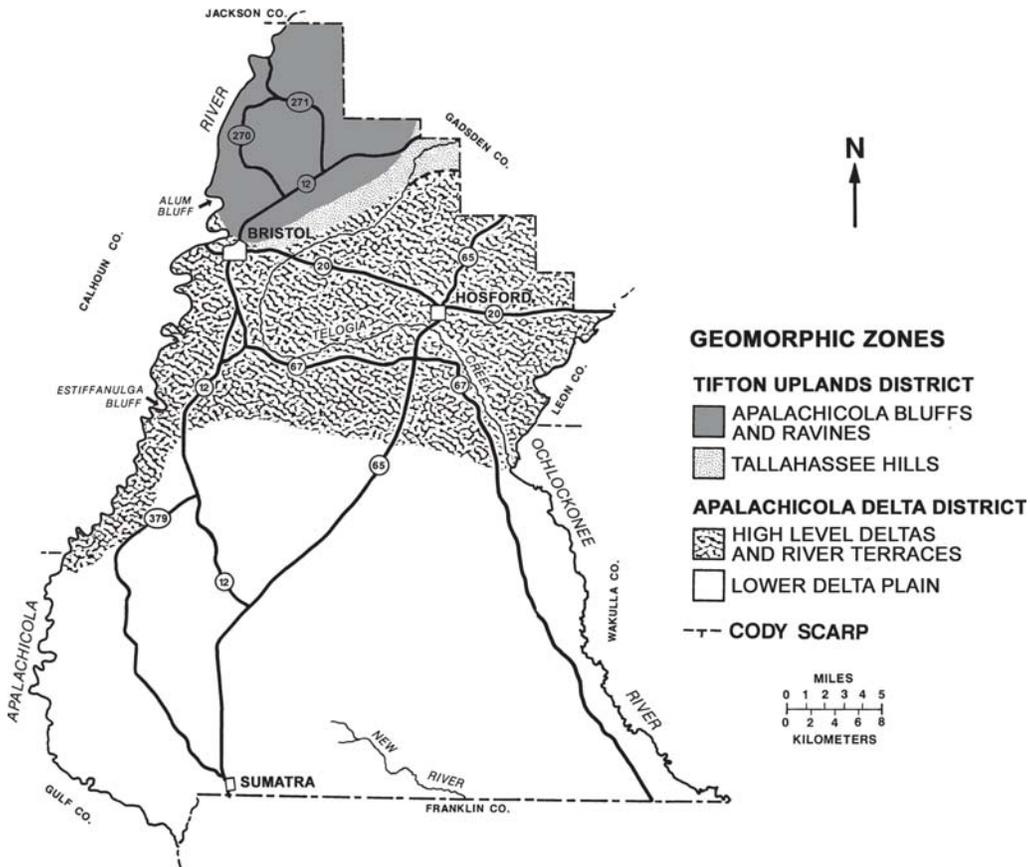


Figure 13.—Geomorphic features in Liberty County (after Scott, in preparation).

Apalachicola Bluffs and Ravines.—The Apalachicola River forms the western boundary of Liberty County. On the east bank of the river, a unique zone of erosional bluffs overlooks a flat flood plain west of the river. The steepest bluffs are in the northwestern part of Liberty County, where the highland terrain ends abruptly at the Apalachicola River. The bluffs commonly stand 150 feet or more above the floor of the flood plain and expose Miocene- to Holocene-age strata. Alum Bluff, located about 2.5 miles northwest of Bristol on the Apalachicola River, is one of the best geologic exposures in Florida (Schmidt, 1983; Johnson, 1989). Land surface elevations within the Apalachicola Bluffs and Ravines zone range from about 30 feet above mean sea level (MSL) at the toe of Alum Bluff up to about 300 feet above MSL near the northern tip of the county.

The river bluffs are locally dissected by a series of deep, east-west trending ravines containing small creeks that drain into the Apalachicola River. Many of these ravines extend several miles east of the river, ending at “steepheads” (Sellards and Gunter, 1918). Steepheads form from lateral undercutting of the sandy surficial sediments by water seeping out of the Surficial Aquifer System. Ground water percolates downward through the surficial sediments until it encounters clay or marl. It then travels horizontally over the less permeable strata and emerges as a small spring or seep at a bluff face. Gradually, the flowing water undermines the overburden material, which slumps off and forms a semicircular, steep-walled head. As undermining and slumping continue over time, the steephead migrates laterally away from the original bluff face, cutting a ravine as it progresses. Other steepheads may branch off from the original ravine, forming a dendritic series of smaller ravines feeding the parent ravine. The deep ravines and steepheads in turn comprise unique microclimates and ecological niches for a variety of rare flora and fauna.

Tallahassee Hills.—The name “Tallahassee Hills” was proposed by Cooke (1939) for the series of topographic hills in northern Florida delineated by the Georgia State line on the north, the coastal lowlands on the south, the Withlacoochee River on the east, and the Apalachicola River on the west. Scott (in preparation) defines two additional geomorphic zones within this area: the Apalachicola Bluffs and Ravines bordering the Apalachicola River on the western end and the Madison Hills on the eastern end. In Liberty County, the Tallahassee Hills zone comprises a small sliver of terrain in the northeastern part of the county. It is bordered to the west by the Apalachicola Bluffs and Ravines zone and to the south by the High Level Deltas and River Terraces zone.

The sediments comprising the Tallahassee Hills may be deltaic or shallow marine in origin. The hilltops are composed largely of resistant clayey sands, silts, and clays. The modern hilly topography is the result of post-depositional dissection and erosion by running water. Elevations of the hills within Liberty County vary from about 140 feet above MSL near Bristol up to about 275 feet above MSL in the northeastern part of the county.

Apalachicola Delta District

In contrast to the incised highlands of the northern part of the county, the central and southern parts of the county transition southward into a generally flatter, sandy plain. Scott (in preparation) includes this region in the Apalachicola Delta District. This district ranges from central Bay County to the western third of Wakulla County, where it merges with the western-most edge of the Ocala Karst District on the Woodville Karst Plain. The region generally corresponds to the Fountain Ridge, Beacon Slope, and Gulf Coastal Lowlands zones of White et al. (1964).

The Apalachicola Delta District represents ancient fluvial deltas and associated marine terraces shaped by high-standing Neogene seas. Streams in the region commonly exhibit distinct trellis drainage patterns controlled by the positions of relict, high level marine terraces (Tanner, 1982; Brooks, 1981; Scott, in preparation). Two

subzones of the district are present locally: the High Level Deltas and River Terraces zone, which is at a higher elevation and is generally well-drained, and the Lower Delta Plain and Coastal Lowlands zone, which is swampier and comprises much of the southern part of the county.

East of Liberty County, the Cody Scarp, which is a relict, southward-facing marine escarpment (Puri and Vernon, 1964), forms the boundary between the Apalachicola Delta District and the topographically higher Tifton Uplands to the north. This escarpment spans much of northern Florida. It is one of the most persistent topographic breaks in the state. The Cody Scarp has been obscured by erosion in most of the northern part of Liberty County. In a small section of the northeastern part of the county, the scarp rises from a toe elevation of about 205 feet above MSL to a crest of about 220 feet above MSL, marking the southern extent of the Tallahassee Hills zone.

High Level Deltas and River Terraces.—Scott (in preparation) includes a portion of north-central Liberty County in the High Level Deltas and River Terraces zone. This zone extends from the northeastern-most part of Bay County across Calhoun and Liberty Counties to the western part of Wakulla County. Land surface elevations range from about 75 feet above MSL at the southern edge of the zone to more than 200 feet above MSL at the northern edge. Throughout much of the zone, the terrain consists of generally well drained, unconsolidated, Citronelle Formation and Quaternary undifferentiated siliciclastic sediments. In the north-central and eastern parts of Liberty County, the terrain has shallow occurrences of Torreya and Jackson Bluff Formations.

Lower Delta Plain and Coastal Lowlands.—The southern half of Liberty County is characterized by flat, sandy terrain containing shallow, densely wooded, swamplike areas called “bays,” and poorly-defined creeks. White et al. (1964) placed this area in the Gulf Coastal Lowlands and Scott (in preparation) includes this area in the Lower Delta Plain and Coastal Lowlands zone. This zone is in a swath in the south-central panhandle, roughly centered on the Apalachicola River, extending from the eastern part of Bay County eastward to the western part of Wakulla County. Elevations in this zone range from about 5 feet above MSL at the southern edge of the zone to about 75 feet above MSL at the northern edge. Swampy, poorly-drained conditions are widespread in this zone. Quaternary undifferentiated siliciclastics form the surficial sediments, and the shallow Miocene Torreya Formation and the Pliocene Jackson Bluff and Intracoastal Formations are along the eastern edge of the county.

Stream Systems

The Apalachicola and Ochlockonee Rivers are the major streams in Liberty County. The Apalachicola River forms the western boundary of the county. In the northwestern part of the county, the river has cut an impressive series of bluffs along its eastern bank. The river is about 30 feet above MSL in that area and gradually descends to about 7 feet above MSL where it leaves the county to the south. The river meanders generally southwestward, then turns to the southeast from a point west of Sumatra, where the valley coalesces into the swampy terrain of the Lower Delta Plain and Coastal Lowlands zone.

The Ochlockonee River forms the eastern boundary of Liberty County. Leon and Wakulla Counties are to the east. The river is dammed as a hydroelectric power source just above Highway 20 in Leon County, forming Lake Talquin. South of the dam, the river meanders over a broad, swampy valley that averages about 1 mile in width. In the northeastern part of Liberty County, the river valley is about 40 feet above MSL. Numerous small creeks contribute to the river, and oxbow lakes are common along the northern stretch of the river. In the southeastern part of the county, the valley broadens considerably, merging with low, swampy “bays” in the

Apalachicola National Forest. Elevations in the area average about 10 feet above MSL. The Ochlockonee River empties into Apalachee Bay southeast of Liberty County.

A number of small creeks drain the flat, swampy terrain of central Liberty County and empty into the Apalachicola and Ochlockonee Rivers. Telogia Creek is the largest of these. It enters the northeastern part of Liberty County from adjacent Gadsden County, arcs through the north-central part of Liberty County, and joins the Ochlockonee River southeast of Hosford.

Stratigraphy

Liberty County is underlain by thousands of feet of marine limestones, dolostones, and siliciclastics (sands and clays) (Cooke and Mossom, 1929). The oldest rocks recovered from deep oil-test-well drilling in the county were Paleozoic Erathem (570 to 250 million years ago) igneous rocks from depths of about 12,000 feet below land surface (BLS) (Applegate et al., 1978). The youngest sediments in the county are Pleistocene and Holocene (1.8 million years old to recent) alluvium and marine terrace sands and clays. Figure 14 is a geologic map of Liberty County, illustrating the units lying within 20 feet of the land surface.

The Mesozoic Erathem (250 to 65 million years ago) and early Cenozoic Erathem (Paleocene and Eocene Series, 65 to 38 million years ago) rocks underlying Liberty County are largely marine carbonates and interbedded siliciclastics at depths penetrated only by deep oil-test-wells. Most water wells in Liberty County draw from Oligocene and Miocene (38 to 5 million years ago) strata at depths of 500 feet BLS or less. One deep municipal well taps Eocene (40 to 38 million years ago) limestone. These rocks function as important freshwater aquifers for the region. The discussion of the stratigraphy of Liberty County is limited to Eocene and younger sediments. Figure 14 includes the location of the geologic cross sections, and figures 15 and 16 illustrate the shallow stratigraphy of the county. Most of the geologic data cited in this study is from Schmidt (1984), Puri and Vernon (1964), Scott et al. (2001), and Florida Geological Survey well-log files.

Eocene Series

Ocala Limestone.—The Ocala Limestone (Dall and Harris, 1892) comprises a series of Upper Eocene (41 to 38 million years ago) marine limestone units that underlie most of Florida. In Liberty County, sediments of the Ocala Limestone are typically white to very pale orange, slightly dolomitic, highly microfossiliferous, calcarenitic limestone. The Ocala Limestone is highly porous and is an important component of the Floridan Aquifer System. The Ocala Limestone was penetrated at a depth of 660 feet BLS in one municipal water well in the city of Bristol. Because this unit is deeper than 600 feet BLS countywide, it is not used extensively as a water source in the county. The Ocala Limestone is overlain by the Oligocene Marianna and Suwannee Limestones.

Oligocene Series

Marianna Limestone.—The Marianna Limestone (Matson and Clapp, 1909) consists of gray to very light orange, chalky, fossiliferous marine limestone that commonly contains large, coin-shaped *Lepidocyclina* foraminifera fossils. The Marianna Limestone is Early Oligocene (38 to 33 million years ago) in age. It was penetrated by only one core (W-6901) in the northwestern part of Liberty County, and its extent under the county is uncertain due to a general lack of well coverage. It probably underlies the western part of the county at depths in excess of 400 feet BLS but pinches out to the east. The Marianna Limestone is overlain by sediments of the Lower Oligocene Suwannee Limestone.

Soil Survey of Liberty County, Florida

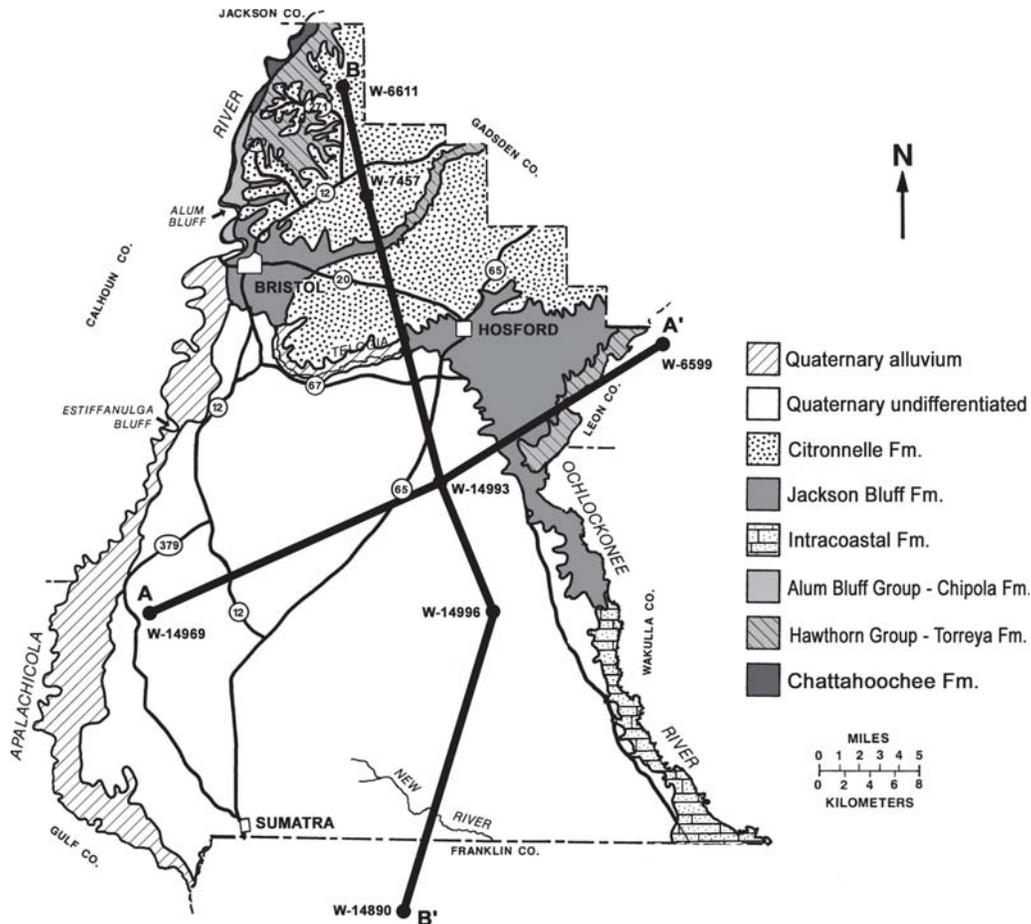


Figure 14.—Geologic units and cross sections in Liberty County (from Scott et al., 2001).

Suwannee Limestone.—The Suwannee Limestone (Cooke and Mansfield, 1936) is a Lower Oligocene (33 to 25 million years ago) light gray to yellowish gray, well-indurated, commonly dolomitized marine limestone. It typically contains abundant fossils including foraminifera, mollusks, and echinoids. Depth to the Suwannee Limestone ranges from about 350 to 450 feet BLS. The thickness of the unit is variable and typically exceeds 100 feet. The unit generally dips and thickens to the southwest into the trough of the Apalachicola Embayment. The Suwannee Limestone is a component of the Floridan Aquifer System. It unconformably overlies the Oligocene Marianna Limestone, where present, or Eocene Ocala Limestone carbonates. The Suwannee Limestone is overlain by Miocene sediments of the Chattahoochee, St. Marks, or Chipola Formations or by the Bruce Creek Limestone.

Miocene and Pliocene Series

Chattahoochee and St. Marks Formations.—The Lower Miocene (25 to 20 million years ago) Chattahoochee and St. Marks Formations (Dall and Stanley-Brown, 1894; Finch, 1823) overlie the Suwannee Limestone in Liberty County. The Chattahoochee Formation is generally a very pale orange to white or light gray, commonly quartz sandy, phosphoritic, dolomitic marine limestone. It is under the northern and western parts of Liberty County. The age-equivalent St. Marks Formation is a white to cream, fossiliferous, calcilitic limestone underlying the southern and eastern parts of the county. The two units interfinger in the north-central part of the county (Schmidt, 1984; Scott, 1988).

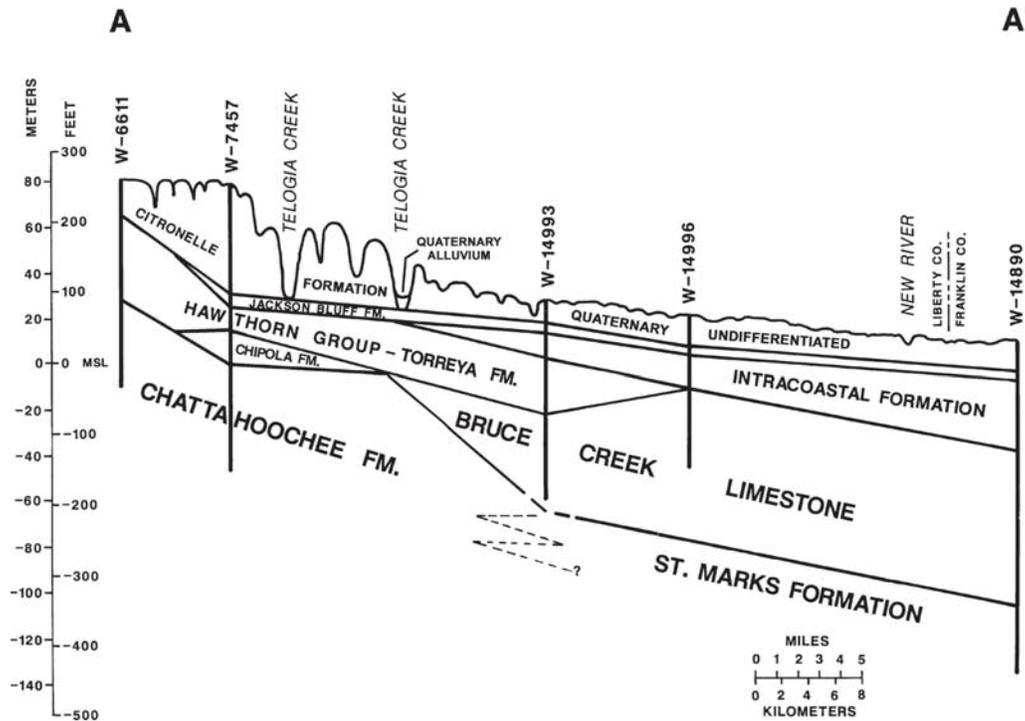


Figure 15.—Cross section of geologic materials at sites A to A'. The vertical exaggeration is approximately 175 times true scale.

In some cases, post-depositional alteration of the carbonates by ground water in parts of the central and western panhandle has made differentiation of the Chattahoochee and St. Marks Formations from the underlying Suwannee Limestone and the overlying Bruce Creek Limestone difficult or impossible. Where definable in Liberty County, the top of the Chattahoochee and St. Marks Formations ranges from about 75 to 200 feet BLS. The thickness of the formations averages about 200 feet. As with the underlying Suwannee Limestone, the Chattahoochee and St. Marks Formations dip to the west-southwest. Along the southern edge of the county, the Bruce Creek Limestone overlies the Chattahoochee and St. Marks Formations. In the northernmost part of the county, the Bruce Creek Limestone is not present and the Chattahoochee Formation is overlain by sediments of the Miocene Chipola Formation or Torrey Formation. The Chattahoochee and St. Marks Formations are units of the Floridan Aquifer System. Many rural wells in the county draw from these formations.

Chipola Formation.—The Chipola Formation (Burns, 1889) is a Lower Miocene carbonate unit underlying some of the northernmost parts of Liberty County. It is typically comprised of yellowish gray to light gray, moderately indurated to well indurated, quartz sandy, marine limestone. It is exposed as the basal unit at Alum Bluff, north of Bristol on the Apalachicola River, where it commonly contains abundant fossil mollusks. The Chipola Formation ranges from about 60 to 200 feet BLS in Liberty County and reaches a maximum thickness of about 50 feet. It is overlain by sediments of the Middle Miocene Torrey Formation or the Upper Pliocene Jackson Bluff Formation.

Hawthorn Group-Torrey Formation.—The Lower Miocene Torrey Formation (Banks and Hunter, 1973; Huddlestone and Hunter, 1982; Scott, 1988) of the Hawthorn Group underlies the northern part Liberty County, extending from Leon County westward to its type section at Rock Bluff in Torrey State Park along the Apalachicola River. In Liberty County, the Torrey Formation is typically a siliciclastic

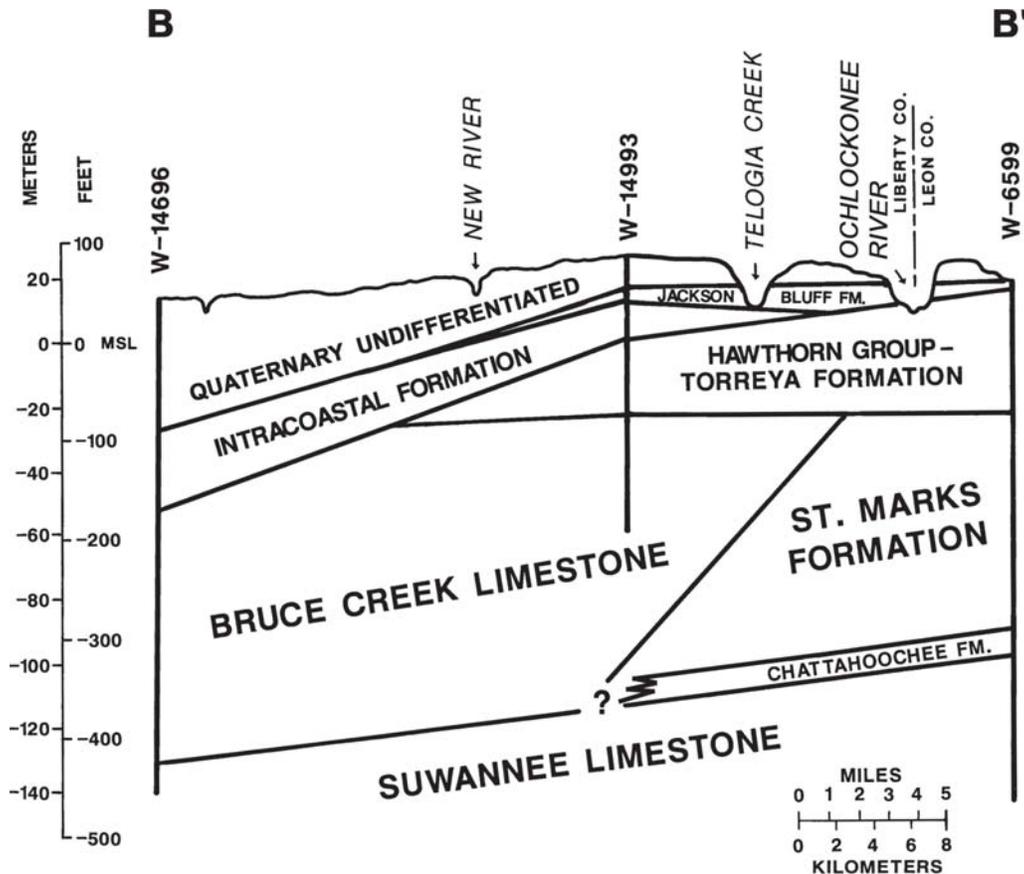


Figure 16.—Cross section of geologic materials at sites B to B'. The vertical exaggeration is approximately 175 times true scale.

unit consisting of light gray to pale orange quartz sands and clays, commonly containing variable amounts of phosphorite. The lower portion of the unit is commonly comprised of a light olive gray, sandy, phosphoritic, and locally dolomitic limestone. Depth to the top of the formation in Liberty County varies considerably, ranging from about 10 to 100 feet BLS. The thickness of the unit is also highly variable, reaching 100 to 200 feet in the northeastern part of the county. The Torreya Formation is unconformably overlain by sediments of the Intracoastal or Jackson Bluff Formations.

Bruce Creek Limestone.—The Middle Miocene (17 to 10 million years ago) Bruce Creek Limestone (Huddleston, 1984) is a white to yellowish gray, fossiliferous, calcarenitic, marine limestone underlying most of the central and southern parts of Liberty County. It is commonly highly microfossiliferous, molluscan moldic, and, in some areas, dolomitic. From the north-central part of the county, the unit thickens and dips rapidly towards the south into the trough of the Apalachicola Embayment. The Bruce Creek Limestone ranges in depth from about 125 feet BLS at its northern limit in the central part of the county to over 200 feet BLS in the southern part of the county. It increases significantly in thickness from zero, in the central part of the county, southward to about 200 feet near the Liberty-Franklin County line. The Bruce Creek Limestone is the uppermost unit of the Floridan Aquifer System in Liberty County. It is overlain by sediments of the Intracoastal, Chipola, or Torreya Formations.

Intracoastal Formation.—The Intracoastal Formation (Huddleston, 1984; Schmidt and Clark, 1980) is comprised of a yellowish gray, abundantly microfossiliferous, sandy, poorly indurated, marine limestone. It ranges in age from Middle Miocene to

Late Pliocene (17 to 2 million years ago). The Late Miocene and Early Pliocene portions are not present due to a hiatus. Like the underlying Bruce Creek Limestone, the updip limit of the Intracoastal Formation is along a west-to-east line under the northern part of Liberty County. The formation generally is not present north of the town of Hosford. It thickens and dips to the south-southwest, approaching 100 feet in thickness in the southeastern corner of the county. Depth to the top of the unit in Liberty County is highly variable, generally ranging from 50 to 150 feet BLS. The Intracoastal Formation is locally overlain by sediments of the Chipola, Torreya, or Jackson Bluff Formations.

Pliocene Series

Jackson Bluff Formation.—The Upper Pliocene (3 to 1.8 million years ago) Jackson Bluff Formation (Puri and Vernon, 1964) is predominantly comprised of light gray to olive gray, poorly consolidated, clayey quartz sands and sandy shell beds. It overlies the Chipola, Torreya, and Intracoastal Formations in Liberty County. The Jackson Bluff Formation is a thin unit, attaining a maximum thickness of about 30 feet in the western part of the county. Depth to the top of the Jackson Bluff Formation is variable throughout the county, ranging from 20 to 100 feet BLS. The formation is in the shallow subsurface in the northern part of the county near Bristol and east and south of Hosford. The formation crops out locally at Alum Bluff along the Apalachicola River. In the northern part of the county, it is overlain by the Citronelle Formation and undifferentiated sediments. In the southern part of the county, it is covered by undifferentiated sands and clays.

Citronelle Formation.—The reddish, clayey, coarse quartz sands and gravels of the Upper Pliocene Citronelle Formation (Matson and Clapp, 1916) blanket the Tallahassee Hills in the northern part of Liberty County. Believed to be of fluvial origin, the characteristic Citronelle Formation sediments are comprised of cross-bedded sands, gravels, and clays. Parts of the Quaternary undifferentiated deposits in the county may represent reworked and redeposited Citronelle sediments that were transported from the eroding highlands to the north. The thickness of the formation generally ranges from 20 to 80 feet, and the Citronelle deposits comprise the surficial sediments in their area of occurrence.

Quaternary Undifferentiated.—Much of central and southern Liberty County is covered by surficial quartz sands, clays, clayey sands, and gravels. Because of the massive and discontinuous nature of these units, they are grouped together as undifferentiated deposits. These deposits represent a mixture of marine and fluvial siliciclastics associated with Pleistocene (1.8 million to 10,000 years ago) sea level highstands and the prograding Apalachicola delta.

Quaternary Alluvium.—Quaternary alluvium, in the form of river-borne clays and quartz sand and gravel, is deposited in mappable thickness along the banks and bars of the Apalachicola River and Telogia Creek. Thinner deposits are in other stream courses in the county. The thinner deposits largely represent the reworked sediments from older surface siliciclastic units in the northern part of the county and in adjacent counties.

Ground Water

Ground water is water that fills the pore spaces in subsurface rocks and sediments. In Liberty County and adjacent counties, it is derived principally from precipitation. The bulk of the consumptive water in Liberty County is withdrawn from ground water aquifers. Three main aquifers are under the county. In ascending order, they are the Floridan Aquifer System, the Intermediate Aquifer System, and the Surficial Aquifer System. Data on the extent and thickness of the aquifers are taken from Scott et al. (1991).

Floridan Aquifer System

The Floridan Aquifer System (FAS) is comprised of hundreds of feet of Eocene through Miocene aged marine limestones, including the Ocala Limestone, the Marianna and Suwannee Limestones, and, where present, the Chattahoochee Formation, St. Marks Formation, and Bruce Creek Limestone. Depth to the top of the FAS ranges from about 50 feet below land surface (BLS) at the southern edge of the county to nearly 200 feet in the west-central part of the county. The Floridan Aquifer System is the principal source of drinking water in Liberty County. It occurs as an artesian aquifer under the entire county. Surface springs issuing from this aquifer are not present in Liberty County. Most of the regional recharge occurs further to the northwest in Jackson County, where the strata comprising the FAS crop out at the surface.

Intermediate Aquifer System

The Intermediate Aquifer System (IAS) overlies the Floridan Aquifer System in Liberty County and is largely contained within the Torreya, Intracoastal, Chipola, and Jackson Bluff Formations. Permeable beds within the IAS vary considerably in thickness over the areal extent of the aquifer. In general, the IAS ranges from 100 to 200 feet in thickness under Liberty County, corresponding to the variable thicknesses of the geologic formations containing it. Depth to the top of the IAS is also highly variable. The aquifer has surface outcrop along rivers and creeks in the northeastern and northwestern parts of the county, is 20 feet BLS or less at the southern edge of the county, and is as much as 100 feet BLS under the northernmost tip of the county. Some rural wells draw from this unit, but the IAS is not widely used as a potable water source in this area. Low-permeability beds in the basal IAS may locally function as confining units to the underlying Floridan Aquifer System.

Surficial Aquifer System

The Surficial Aquifer System (SAS) is the uppermost freshwater aquifer in Liberty County. This non-artesian aquifer is largely contained within sediments of the Quaternary undifferentiated and the Citronelle Formation. It is under most of Liberty County, reaching a maximum measured thickness of about 118 feet in the north-central part of the county. In the central and southern parts of the county, it is highly variable in thickness, ranging from about 20 to 70 feet. The SAS is unconfined, and its upper surface is the water table. In general, the elevation of the water table fluctuates with the precipitation rate and conforms to the topography of the land surface. Recharge to the SAS is largely through rainfall percolating through the loose surficial sediments, and, to a lesser extent, by upward seepage from the underlying Intermediate Aquifer System. The SAS is not used extensively as a water source in the county.

Mineral Resources

The principal mineral resources in Liberty County are sand, gravel, clay, limestone, peat, phosphate, heavy minerals, and petroleum. The following discussion summarizes the mining potential of each commodity in the county.

Sand and Gravel

Quaternary marine terrace sands and alluvium and Pliocene Citronelle Formation sediments are comprised of quartz sand with varying amounts of clay matrix. These deposits blanket much of the county. A number of shallow, private pits in Liberty County are worked for locally used fill sand. Also, the U.S. Forest Service routinely digs clayey sand for use in stabilizing forest roads in the southern part of the county (Patterson et al., 1986). None of the sand is utilized commercially.

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Patterson et al. (1986) report a stratum of quartz sand and gravel at a depth of about 15 feet below the Apalachicola National Forest in the southern part of the county. Although this deposit is of commercial quality, its remote location and thinness (about 13 feet) preclude commercial mining. Also, sand and gravel products are produced more economically in other parts of the Florida panhandle, thus lessening the potential for large-scale mining in Liberty County.

Clay

Localized deposits of clay and sandy clay are associated with the Quaternary undifferentiated marine terrace deposits, Quaternary alluvium, and Citronelle Formation sediments. Most of this clay is relatively impure because it is contained in and interbedded with other sediments. Miocene age fuller's earth is mined to the northeast in Gadsden County, but no commercial-grade deposits are known in Liberty County. The fuller's earth is palygorskite (attapulgite).

Clay deposits from the flood plains along the Apalachicola and Ochlockonee Rivers have been used for brick making in nearby Calhoun and Gadsden Counties (Bell, 1924). Clays collected at Estifanulga Bluff along the Apalachicola River in Liberty County were tested for firing and working properties (Bell, 1924). The clays were suitable for common brick, hollow block ware, drain tile, and earthenware but were never commercially exploited.

Patterson et al. (1986) noted the presence of a sandy, shelly, plastic clay in a test boring in Liberty County in the Apalachicola National Forest. The sand and shells and the remote location of the deposit preclude economic mining.

Reserve estimates of the clay deposits in Liberty County have not been made. Future exploitation will depend largely on local market demand.

Limestone

Impure Miocene limestones are at depth under most of Liberty County. The shallower units typically contain extensive impurities, including quartz sand. The limestone is not likely to ever be an economical commodity in Liberty County because of these impurities, the thickness of the overburden (at least 50 feet), and the presence of easily accessible limestone deposits at the surface in nearby Jackson County.

Peat

Peat deposits form in a wet, reducing environment when accumulation of organic materials (vegetation) exceeds the decomposition rate of that material (Bond et al., 1986). Although such conditions are common in the swampy bays covering much of the Apalachicola National Forest in the southern part of Liberty County, only thin layers of noncommercial peaty material (organic deposits containing more than 25 percent ash) are present (Patterson et al., 1986).

Phosphate

Many of the Miocene and Pliocene formations underlying Liberty County contain variable amounts of phosphate sand and phosphate granules. Patterson et al. (1986) reported the phosphate content of sediments from test borings in the southern part of the county and adjacent counties to be well below the minimum percentage necessary for commercial use. Also, most of the phosphate-bearing strata are at depths of more than 50 feet. These factors preclude a high potential for mining phosphate in the county.

Heavy Minerals

Heavy minerals, such as rutile, ilmenite, zircon, and staurolite, are minor components of the surficial and near-surface sediments in Liberty County. Although a county-wide study has not been conducted, Patterson et al. (1986) determined that

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the concentrations of heavy minerals in test borings in the southern part of the county were significantly below the minimum percentage necessary for commercial use. Also, the wide range of minerals present (as compared to a concentration of a specific, more valuable mineral) further reduces the economic potential of the deposits. Therefore, the potential for mining is low.

Petroleum

Petroleum is produced from the Jurassic-age Smackover Formation and Norphlet Sandstone west of Liberty County in the Jay trend of Santa Rosa County. These formations are also present under Liberty County, but four oil wells drilled in the county to test these strata were dry holes (Applegate et al., 1978; Patterson et al., 1986). Although commercial production of petroleum in Liberty County appears unlikely, only continued exploration of the Jurassic and older units would ultimately rule out the discovery of oil and gas under the county.

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Glossary

ABC soil. A soil having an A, a B, and a C horizon.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

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

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

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

- Bedding planes.** Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.
- 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.
- Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- Bench terrace.** A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.
- Bisequum.** Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.
- Bottom land.** The normal flood plain of a stream, subject to flooding.
- Boulders.** Rock fragments larger than 2 feet (60 centimeters) in diameter.
- 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.
- California bearing ratio (CBR).** The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.
- Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
- Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.
- Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity.** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- Chemical treatment.** Control of unwanted vegetation through the use of chemicals.
- Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.
- Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

- Clay depletions.** Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.
- Clay film.** A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.
- Claypan.** A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.
- Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
- Coarse textured soil.** Sand or loamy sand.
- Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.
- Cobbly soil material.** Material that is 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- Colluvium.** Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
- Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.
- Conglomerate.** A coarse grained, clastic rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.
- Conservation cropping system.** Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

- Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.
- Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- Cropping system.** Growing crops according to a planned system of rotation and management practices.
- Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.
- Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Culmination of the mean annual increment (CMAI).** The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- Cutbanks cave** (in tables). The walls of excavations tend to cave in or slough.
- Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.
- Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period.
- Delta.** A body of alluvium having a surface that is nearly flat and fan shaped; 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.
- 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.
- Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen

plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

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

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

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

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

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

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 layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from 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 terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of 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 oven-dry 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. 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.** The normal flood plain of a stream, subject to frequent or occasional flooding.
- Flatwoods.** Broad, low-gradient, low-relief interstream areas characterized by nonhydric, poorly drained soils that are naturally forested by pines and have an understory dominated by saw palmetto. Flatwoods are slightly above minor depressions that have a seasonal water table at or above the surface, drainageways, and heads of drains and are below better drained and slightly higher small rises or knolls.
- Flood plain.** A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.
- Fluvial.** Of or pertaining to rivers; produced by river action, as a fluvial plain.
- Footslope.** The inclined surface at the base of a hill.
- 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 is 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Green manure crop (agronomy).** A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Gully.** A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.
- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hardpan.** A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.
- Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

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

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

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

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

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

Infiltration 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

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

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

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

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

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.

Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

Knoll. A small, low, rounded hill rising above adjacent landforms.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lamellae. Thin (less than 7.5 centimeters thick) illuvial horizons that have evidence of translocated clay and have more clay than overlying eluvial horizons.

Sequences of lamellae can qualify as a cambic horizon if they have a combined thickness of more than 15 centimeters and are not sandy, or they can qualify as

an argillic horizon if they have a combined thickness of more than 15 centimeters and the increase in content of clay is sufficiently large between the lamellae and eluvial horizons.

- Landslide.** The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.
- Leaching.** The removal of soluble material from soil or other material by percolating water.
- 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.
- 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.
- Low strength.** The soil is not strong enough to support loads.
- Marl.** An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.
- Masses.** Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.
- Mechanical treatment.** Use of mechanical equipment for seeding, brush management, and other management practices.
- Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.
- Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- Miscellaneous area.** An area that has little or no natural soil and supports little or no vegetation.
- Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.
- Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil.** Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).
- Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

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

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

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

Open depression. A generic name for any enclosed or low area that has a surface drainage outlet whereby surface water can leave the enclosure.

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

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 downward movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

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

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

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

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

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.

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.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features

indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

- Reduced matrix.** A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.
- Regolith.** The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.
- Relief.** The elevations or inequalities of a land surface, considered collectively.
- Residuum (residual soil material).** Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.
- Rill.** A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.
- Rise.** A geomorphic component of flat plains consisting of a slightly elevated but low, broad area with low slope gradients (1 to 3 percent slopes). Typically, soils on a rise are better drained than those on the surrounding lower area.
- 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.
- Saturation.** Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
- Second bottom.** The first terrace above the normal flood plain (or first bottom) of a river.
- Sedimentary rock.** Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.
- Seepage** (in tables). The movement of water through the soil. Seepage adversely affects the specified use.
- Sequum.** A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)
- Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
- Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- Shrink-swell** (in tables). The shrinking of soil when dry and the swelling when wet.

Soil Survey of Liberty County, Florida

Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

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.

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.

Sinkhole. A depression in the landscape where limestone has been dissolved.

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. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 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 45 percent
Very steep	45 percent and higher

Classes for complex slopes are as follows:

Level	0 to 2 percent
Gently undulating	2 to 5 percent
Undulating	5 to 8 percent
Rolling	8 to 15 percent
Hilly	15 to 25 percent
Steep	25 to 45 percent
Very steep	45 percent and higher

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 $\text{Ca}^{++} + \text{Mg}^{++}$. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

- Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.
- Soil separates.** Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

- Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- Stones.** Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.
- Stripcropping.** Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.
- Structure, soil.** The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).
- Stubble mulch.** Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.
- Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth.
- Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.
- Substratum.** The part of the soil below the solum.
- Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer.
- Summer fallow.** The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.
- Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."
- Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- Terrace.** An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field

generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toe slope. The outermost inclined surface at the base of a hill; part of a foot slope.

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.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Variation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

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 and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Soil Survey of Liberty County, Florida

Table 1.--Temperature and Precipitation
 [Recorded in the period 1971-2000 at Quincy, Florida]

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 or more	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-----	62.2	40.0	51.1	80	17	144	5.71	3.02	8.05	7	0.0
February-----	65.8	42.2	54.0	83	19	175	4.54	2.52	6.37	5	0.1
March-----	72.1	48.4	60.2	86	27	332	6.00	3.34	8.34	6	0.0
April-----	78.2	53.4	65.8	90	36	474	3.63	0.99	5.65	4	0.0
May-----	85.1	61.7	73.4	95	45	717	4.80	1.53	7.89	5	0.0
June-----	89.6	68.5	79.0	98	57	866	5.65	3.03	8.18	8	0.0
July-----	90.9	71.0	80.9	99	64	950	6.73	4.17	9.38	10	0.0
August-----	90.1	70.6	80.4	98	63	923	5.42	3.09	7.45	9	0.0
September---	87.4	67.0	77.2	95	53	796	3.75	1.33	6.07	6	0.0
October-----	79.9	56.6	68.2	91	38	558	3.31	0.73	5.78	3	0.0
November----	71.8	48.9	60.4	85	28	327	3.48	1.44	4.96	4	0.0
December----	64.7	42.5	53.6	81	21	187	3.64	2.07	5.23	5	0.0
Yearly:											
Average---	78.2	55.9	67.0	---	---	---	---	---	---	---	---
Extreme---	102	0	---	100	14	---	---	---	---	---	---
Total-----	---	---	---	---	---	6,448	56.66	40.61	68.72	72	0.1

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (50 degrees F).

Soil Survey of Liberty County, Florida

Table 2.--Freeze Dates in Spring and Fall

[Recorded in the period 1971-2000 at Quincy,
Florida]

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--	Feb. 28	Mar. 12	Mar. 19
2 years in 10 later than--	Feb. 19	Mar. 4	Mar. 13
5 years in 10 later than--	Jan. 28	Feb. 17	Mar. 1
First freezing temperature in fall:			
1 year in 10 earlier than--	Dec. 6	Nov. 16	Nov. 3
2 years in 10 earlier than--	Dec. 21	Nov. 28	Nov. 10
5 years in 10 earlier than--	Jan. 23	Dec. 21	Nov. 24

Table 3.--Growing Season

[Recorded in the period 1971-2000 at Quincy,
Florida]

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	<i>Days</i>	<i>Days</i>	<i>Days</i>
9 years in 10	296	256	244
8 years in 10	323	274	253
5 years in 10	> 365	309	269
2 years in 10	> 365	343	285
1 year in 10	> 365	361	294

Soil Survey of Liberty County, Florida

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
2	Albany sand, 0 to 5 percent slopes-----	11,505	2.1
4	Alpin-Foxworth complex, 5 to 12 percent slopes-----	2,800	0.5
5	Rains and Bladen soils-----	15,920	2.9
6	Blanton sand, 0 to 5 percent slopes-----	6,925	1.3
7	Blanton sand, 5 to 8 percent slopes-----	420	*
8	Brickyard clay loam, frequently flooded-----	19,620	3.6
9	Centenary sand, 0 to 5 percent slopes-----	2,845	0.5
11	Chipley-Foxworth complex, 0 to 5 percent slopes-----	8,460	1.6
12	Rutlege and Plummer soils, depressional-----	67,210	12.4
13	Dorovan-Pamlico complex, depressional-----	1,215	0.2
14	Dothan loamy sand, 0 to 2 percent slopes-----	2,320	0.4
15	Dothan loamy sand, 2 to 5 percent slopes-----	1,600	0.3
17	Dothan-Fuquay complex, 8 to 12 percent slopes-----	625	0.1
24	Goldsboro loamy sand, 0 to 2 percent slopes-----	7,025	1.3
25	Goldsboro loamy sand, 2 to 5 percent slopes-----	2,135	0.4
26	Foxworth sand, 0 to 5 percent slopes-----	9,245	1.7
27	Fuquay loamy sand, 0 to 5 percent slopes-----	4,645	0.9
30	Ellore, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded-----	15,070	2.8
31	Hurricane and Chipley soils, 0 to 3 percent slopes-----	4,380	0.8
32	Plummer and Pelham soils-----	11,375	2.1
34	Lakeland sand, 0 to 5 percent slopes-----	34,235	6.3
35	Lakeland sand, 5 to 8 percent slopes-----	2,380	0.4
36	Lakeland sand, 8 to 15 percent slopes-----	2,210	0.4
37	Lakeland-Foxworth complex, 15 to 30 percent slopes-----	1,220	0.2
38	Leefield loamy sand, 0 to 5 percent slopes-----	3,020	0.6
39	Leon sand-----	8,220	1.5
42	Lucy sand, 0 to 5 percent slopes-----	1,190	0.2
44	Lynchburg loamy sand-----	6,380	1.2
45	Lynn Haven sand-----	1,380	0.3
46	Hurricane, Leon, and Albany soils-----	16,355	3.0
47	Torhunta-Lynn Haven-Croatan complex, frequently flooded-----	23,965	4.4
48	Meadowbrook sand-----	3,135	0.6
49	Meadowbrook sand, slough-----	4,560	0.8
54	Pelham loamy sand-----	1,120	0.2
55	Plummer sand, 0 to 5 percent slopes-----	5,900	1.1
56	Pottsburg sand-----	7,460	1.4
57	Surrency, Pantego, and Croatan soils, depressional-----	25,605	4.7
58	Rutlege, Bibb, and Surrency soils, frequently flooded-----	47,040	8.7
59	Hosford mucky coarse sand, 2 to 8 percent slopes-----	3,055	0.6
60	Sapelo sand-----	1,125	0.2
61	Osier sand-----	1,865	0.3
62	Scranton loamy sand, slough-----	6,660	1.2
63	Stilson fine sand, 0 to 3 percent slopes-----	4,050	0.8
65	Pickney, Dorovan, and Bibb soils, frequently flooded-----	14,625	2.7
66	Wahee and Ochlockonee soils, 0 to 3 percent slopes, occasionally flooded-----	19,190	3.6
67	Goldhead sand-----	265	*
68	Goldhead-Meadowbrook complex, depressional-----	775	0.1
69	Troup sand, 0 to 5 percent slopes-----	1,650	0.3
70	Troup sand, 5 to 8 percent slopes-----	455	*
71	Pits-----	300	*
72	Lakeland sand, 30 to 85 percent slopes-----	4,235	0.8
73	Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes-----	660	0.1
74	Garcon, Ochlockonee, and Ousley soils, occasionally flooded-----	400	*
75	Brantley-Okeelala-Lucy complex, 8 to 45 percent slopes-----	1,160	0.2
78	Lucy-Blanton-Cowarts complex, 8 to 45 percent slopes-----	5,565	1.0
81	Scranton fine sand-----	1,900	0.4
82	Brickyard and Chowan soils, frequently flooded-----	4,565	0.8
83	Plummer, Sapelo, and Pottsburg soils-----	61,470	11.4
91	Woodington loamy sand-----	9,260	1.7
92	Pamlico-Pickney complex, frequently flooded-----	730	0.1
95	Bibb, Rains, and Garcon soils, occasionally flooded-----	550	0.1

See footnote at end of table.

Soil Survey of Liberty County, Florida

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
96	Foxworth-Lakeland complex, 0 to 5 percent slopes-----	330	*
97	Foxworth-Lakeland complex, 5 to 15 percent slopes-----	85	*
98	Leon-Chipley complex-----	5	*
99	Water-----	4,155	0.8
101	Albany-Blanton complex, 0 to 5 percent slopes-----	100	*
	Total-----	539,900	100.0

* Less than 0.1 percent.

Soil Survey of Liberty County, Florida

Table 5.--Land Capability and Yields per Acre of Crops and Pasture

[Yields are for nonirrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil]

Map symbol and soil name	Land capability	Bahiagrass	Corn	Soybeans	Tomatoes	Winter wheat
		<i>AUM</i>	<i>Bu</i>	<i>Bu</i>	<i>Tons</i>	<i>Bu</i>
2: Albany-----	3e	6.5	75	20	---	45
4: Alpin-----	6s	7.0	---	---	---	---
Foxworth-----	4s	7.5	---	---	---	---
5: Rains-----	3w	---	---	---	---	---
Bladen-----	6w	---	---	---	---	---
6: Blanton-----	3s	6.5	60	25	---	40
7: Blanton-----	4s	6.5	60	25	---	40
8: Brickyard-----	7w	---	---	---	---	---
9: Centenary-----	3s	7.5	65	20	---	37
11: Chipley-----	3s	7.5	50	25	---	40
Foxworth-----	3s	7.5	---	---	---	---
12: Rutlege-----	7w	---	---	---	---	---
Plummer-----	7w	---	---	---	---	---
13: Dorovan-----	7w	---	---	---	---	---
Pamlico-----	7w	---	---	---	---	---
14: Dothan-----	1	9.0	120	40	23	55
15: Dothan-----	2e	9.0	120	35	23	55
17: Dothan-----	4e	7.0	78	25	23	40
Fuquay-----	3s	7.0	75	25	22	40
24: Goldsboro-----	2w	8.5	115	38	20	35
25: Goldsboro-----	2w	8.5	115	38	20	35

Soil Survey of Liberty County, Florida

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Corn	Soybeans	Tomatoes	Winter wheat
		AUM	Bu	Bu	Tons	Bu
26: Foxworth-----	3s	7.5	50	20	---	30
27: Fuquay-----	2s	8.0	85	30	22	50
30: Elloree-----	6w	---	---	---	---	---
Bibb-----	5w	---	---	---	---	---
Meggett-----	6w	---	---	---	---	---
31: Hurricane-----	3w	7.0	45	20	---	25
Chipley-----	3s	7.5	50	20	---	---
32: Plummer-----	5w	---	---	---	---	---
Pelham-----	5w	---	---	---	---	---
34: Lakeland-----	4s	7.0	55	20	---	35
35: Lakeland-----	6s	6.5	40	18	---	30
36: Lakeland-----	6s	6.5	---	---	---	---
37: Lakeland-----	7s	6.0	---	---	---	---
Foxworth-----	7s	6.5	---	---	---	---
38: Leefield-----	2w	8.0	85	35	---	50
39: Leon-----	4w	7.5	50	20	---	---
Leon, hydric-----	4w	---	---	---	---	---
42: Lucy-----	2s	8.5	80	33	21	50
44: Lynchburg-----	2w	10.0	85	45	---	---
45: Lynn Haven-----	4w	7.5	70	---	---	---
46: Hurricane-----	3w	7.0	45	20	---	25
Leon-----	4w	7.5	50	20	---	---
Albany-----	3e	6.5	75	20	---	45

Soil Survey of Liberty County, Florida

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Corn	Soybeans	Tomatoes	Winter wheat
		AUM	Bu	Bu	Tons	Bu
47:						
Lynn Haven-----	4w	---	---	---	---	---
Torhunta-----	7w	---	---	---	---	---
Croatan-----	7w	---	---	---	---	---
48:						
Meadowbrook-----	4w	5.0	65	30	---	---
Meadowbrook, hydric	4w	---	---	---	---	---
49:						
Meadowbrook, slough	6w	5.0	---	---	---	---
54:						
Pelham-----	3w	6.0	65	30	---	---
Pelham, hydric----	3w	---	---	---	---	---
55:						
Plummer-----	4w	5.0	---	---	---	---
Plummer, hydric----	4w	---	---	---	---	---
56:						
Pottsburg-----	4w	7.0	---	---	---	---
Pottsburg, hydric--	4w	---	---	---	---	---
57:						
Surrency-----	6w	---	---	---	---	---
Pantego-----	6w	---	---	---	---	---
Croatan-----	7w	---	---	---	---	---
58:						
Rutlege-----	5w	---	---	---	---	---
Bibb-----	5w	---	---	---	---	---
Surrency-----	6w	---	---	---	---	---
59:						
Hosford-----	5w	---	---	---	---	---
60:						
Sapelo-----	4w	7.5	50	20	---	---
Sapelo, hydric----	4w	---	---	---	---	---
61:						
Osier-----	5w	5.0	---	---	---	---
62:						
Scranton, slough--	6w	7.5	---	---	---	---
63:						
Stilson-----	2w	7.5	80	35	---	50

Soil Survey of Liberty County, Florida

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Corn	Soybeans	Tomatoes	Winter wheat
		AUM	Bu	Bu	Tons	Bu
65: Pickney-----	7w	---	---	---	---	---
Bibb-----	5w	---	---	---	---	---
Dorovan-----	7w	---	---	---	---	---
66: Wahee-----	4w	---	---	---	---	---
Ochlockonee-----	2w	---	---	---	---	---
67: Goldhead-----	3w	7.5	---	---	---	---
68: Goldhead-----	7w	---	---	---	---	---
Meadowbrook-----	7w	---	---	---	---	---
69: Troup-----	3s	7.20	60	25	18	40
70: Troup-----	4s	7.0	55	22	16	35
71: Pits-----	8s	---	---	---	---	---
72: Lakeland-----	7s	---	---	---	---	---
73: Foxworth-----	7s	---	---	---	---	---
Hosford-----	6w	---	---	---	---	---
Lucy-----	7s	---	---	---	---	---
74: Garcon-----	2w	---	---	---	---	---
Ochlockonee-----	2w	---	---	---	---	---
Ousley-----	3w	---	---	---	---	---
75: Brantley-----	7e	7.0	---	---	---	---
Okeelala-----	7e	---	---	---	---	---
Lucy-----	4s	7.5	---	---	---	---
78: Lucy-----	7s	8.0	---	---	---	---
Blanton-----	7s	6.5	---	---	---	---
Cowarts-----	6e	8.5	---	---	---	---
81: Scranton-----	3w	8.0	---	---	---	---

Soil Survey of Liberty County, Florida

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Corn	Soybeans	Tomatoes	Winter wheat
		<i>AUM</i>	<i>Bu</i>	<i>Bu</i>	<i>Tons</i>	<i>Bu</i>
82: Brickyard-----	7w	---	---	---	---	---
Chowan-----	7w	---	---	---	---	---
83: Plummer, hydric----	4w	---	---	---	---	---
Sapelo-----	4w	7.5	50	20	---	---
Pottsburg-----	4w	7.0	---	---	---	---
91: Woodington-----	6w	---	---	---	---	---
92: Pamlico-----	7w	---	---	---	---	---
Pickney-----	7w	---	---	---	---	---
95: Bibb-----	5w	---	---	---	---	---
Rains-----	4w	---	---	---	---	---
Garcon-----	2w	---	---	---	---	---
96: Foxworth-----	3s	7.5	---	---	---	---
Lakeland-----	4s	6.5	---	---	---	---
97: Foxworth-----	4s	7.5	---	---	---	---
Lakeland-----	6s	6.5	---	---	---	---
98: Leon-----	4w	7.5	50	20	---	---
Chipley-----	3s	7.5	50	25	---	40
Leon, hydric-----	4w	---	---	---	---	---
99: Water.						
101: Albany-----	3e	6.5	75	20	---	45
Blanton-----	3s	6.5	60	25	---	40

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Too acid	0.43	Too acid	0.99
		Droughty	0.01	Droughty	0.01
4: Alpin-----	45	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.77
		Too acid	0.22	Slope	0.04
		Slope	0.04	Droughty	0.01
		Droughty	0.01		
Foxworth-----	40	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
5: Rains-----	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching	0.70	Too acid	0.77
		Too acid	0.22		
Bladen-----	40	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Too acid	0.73	Too acid	1.00
		Runoff	0.40		
6: Blanton-----	85	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Low adsorption	0.33	Low adsorption	0.32
		Too acid	0.32	Droughty	0.01
		Droughty	0.01		
7: Blanton-----	90	Very limited		Very limited	
		Filtering capacity	0.99	Filtering capacity	0.99
		Low adsorption	0.52	Too acid	0.91
		Leaching	0.45	Low adsorption	0.54
		Too acid	0.32	Droughty	0.01
		Droughty	0.01		

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
8: Brickyard-----	70	Very limited Slow water movement Depth to saturated zone Flooding Runoff	1.00 1.00 1.00 0.40	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 1.00
9: Centenary-----	85	Very limited Filtering capacity Droughty Leaching Too acid	0.99 0.89 0.45 0.22	Very limited Filtering capacity Droughty Too acid	0.99 0.89 0.77
11: Chipley-----	50	Very limited Filtering capacity Depth to saturated zone Too acid Droughty	0.99 0.99 0.62 0.23	Very limited Too acid Filtering capacity Depth to saturated zone Droughty	1.00 0.99 0.99 0.23
Foxworth-----	40	Very limited Filtering capacity Leaching Too acid	0.99 0.45 0.32	Very limited Filtering capacity Too acid	0.99 0.91
12: Rutlege-----	50	Very limited Ponding Depth to saturated zone Filtering capacity Too acid Runoff	1.00 1.00 0.99 0.73 0.40	Very limited Ponding Depth to saturated zone Too acid Filtering capacity Droughty	1.00 1.00 1.00 0.99 0.35
Plummer-----	40	Very limited Ponding Depth to saturated zone Filtering capacity Too acid Runoff	1.00 1.00 0.99 0.73 0.40	Very limited Ponding Depth to saturated zone Too acid Filtering capacity Low adsorption	1.00 1.00 1.00 0.99 0.01
13: Dorovan-----	50	Very limited Ponding Depth to saturated zone Too acid Runoff	1.00 1.00 0.94 0.40	Very limited Ponding Depth to saturated zone Low adsorption Too acid	1.00 1.00 1.00 1.00

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
13: Pamlico-----	35	Very limited Ponding Depth to saturated zone Filtering capacity Too acid Runoff	 1.00 1.00 0.99 0.73 0.40	Very limited Ponding Depth to saturated zone Low adsorption Too acid Filtering capacity	 1.00 1.00 1.00 1.00 0.99
14: Dothan-----	84	Very limited Low adsorption Slow water movement Too acid Depth to saturated zone	 1.00 0.50 0.32 0.09	Very limited Low adsorption Too acid Slow water movement Depth to saturated zone	 1.00 0.91 0.37 0.09
15: Dothan-----	85	Very limited Low adsorption Slow water movement Too acid Depth to saturated zone	 1.00 0.50 0.32 0.09	Very limited Low adsorption Too acid Slow water movement Depth to saturated zone	 1.00 0.91 0.37 0.09
17: Dothan-----	40	Very limited Low adsorption Slow water movement Too acid Slope Depth to saturated zone	 1.00 0.50 0.32 0.16 0.09	Very limited Low adsorption Too acid Slow water movement Slope Depth to saturated zone	 1.00 0.91 0.37 0.16 0.09
Fuquay-----	35	Very limited Low adsorption Filtering capacity Too acid Slope	 1.00 0.99 0.32 0.04	Very limited Filtering capacity Low adsorption Too acid Slope	 0.99 0.93 0.91 0.04
24: Goldsboro-----	90	Very limited Filtering capacity Depth to saturated zone Too acid Low adsorption	 0.99 0.86 0.73 0.53	Very limited Too acid Filtering capacity Depth to saturated zone Low adsorption	 1.00 0.99 0.86 0.18

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
25: Goldsboro-----	90	Very limited Filtering capacity	0.99	Very limited Too acid	1.00
		Depth to saturated zone	0.86	Filtering capacity	0.99
		Too acid	0.73	Depth to saturated zone	0.86
		Low adsorption	0.50	Low adsorption	0.16
26: Foxworth-----	80	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
27: Fuquay-----	80	Very limited Low adsorption	1.00	Very limited Filtering capacity	0.99
		Filtering capacity	0.99	Too acid	0.91
		Too acid	0.32	Low adsorption	0.91
30: Elloree-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Runoff	0.40	Too acid	0.31
		Too acid	0.08		
Bibb-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Too acid	0.73	Too acid	1.00
		Runoff	0.40		
Meggett-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Runoff	0.40	Too acid	0.77
		Too acid	0.22	Filtering capacity	0.01
31: Hurricane-----	45	Very limited Filtering capacity	0.99	Very limited Too acid	1.00
		Depth to saturated zone	0.99	Filtering capacity	0.99
		Too acid	0.62	Depth to saturated zone	0.99
		Droughty	0.10	Droughty	0.10

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
31: Chipley-----	40	Very limited Filtering capacity Depth to saturated zone Too acid Droughty	0.99 0.99 0.62 0.23	Very limited Too acid Filtering capacity Depth to saturated zone Droughty	1.00 0.99 0.99 0.23
32: Plummer-----	45	Very limited Ponding Depth to saturated zone Filtering capacity Too acid Leaching	1.00 1.00 0.99 0.73 0.70	Very limited Ponding Depth to saturated zone Too acid Filtering capacity	1.00 1.00 1.00 0.99
Pelham-----	40	Very limited Ponding Depth to saturated zone Filtering capacity Too acid Leaching	1.00 1.00 0.99 0.73 0.70	Very limited Ponding Depth to saturated zone Too acid Filtering capacity	1.00 1.00 1.00 0.99
34: Lakeland-----	85	Very limited Filtering capacity Droughty Leaching Too acid	0.99 0.70 0.45 0.32	Very limited Filtering capacity Too acid Droughty	0.99 0.91 0.70
35: Lakeland-----	85	Very limited Filtering capacity Droughty Leaching Too acid	0.99 0.70 0.45 0.32	Very limited Filtering capacity Too acid Droughty	0.99 0.91 0.70
36: Lakeland-----	85	Very limited Filtering capacity Droughty Slope Leaching Too acid	0.99 0.70 0.63 0.45 0.32	Very limited Filtering capacity Too acid Droughty slope	0.99 0.91 0.70 0.63
37: Lakeland-----	45	Very limited Slope Filtering capacity Droughty Leaching Too acid	1.00 0.99 0.70 0.45 0.32	Very limited Slope Filtering capacity Too acid Droughty	1.00 0.99 0.91 0.70

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
37: Foxworth-----	40	Very limited Slope	1.00	Very limited Slope	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
38: Leefield-----	85	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Low adsorption	0.52	Too acid	0.91
		Slow water movement	0.50	Slow water movement	0.37
		Too acid	0.32	Low adsorption	0.10
39: Leon-----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.70	Too acid	0.99
		Too acid	0.43		
Leon, hydric-----	20	Not rated		Very limited Depth to saturated zone	1.00
				Filtering capacity	0.99
				Too acid	0.99
42: Lucy-----	85	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Leaching	0.45	Too acid	0.67
		Low adsorption	0.42		
		Too acid	0.18		
44: Lynchburg-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.62	Filtering capacity	0.99
45: Lynn Haven-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Leaching	0.70	Droughty	0.15
		Droughty	0.15		

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46: Hurricane-----	35	Very limited Filtering capacity Depth to saturated zone Too acid Droughty	0.99 0.99 0.62 0.10	Very limited Too acid Filtering capacity Depth to saturated zone Droughty	1.00 0.99 0.99 0.10
Leon-----	30	Very limited Depth to saturated zone Filtering capacity Leaching Too acid	1.00 0.99 0.70 0.43	Very limited Depth to saturated zone Filtering capacity Too acid	1.00 0.99 0.99
Albany-----	25	Very limited Depth to saturated zone Filtering capacity Too acid Droughty	1.00 0.99 0.43 0.01	Very limited Depth to saturated zone Filtering capacity Too acid Droughty	1.00 0.99 0.99 0.01
47: Lynn Haven-----	35	Very limited Depth to saturated zone Flooding Filtering capacity Too acid Leaching	1.00 1.00 0.99 0.73 0.70	Very limited Depth to saturated zone Flooding Too acid Filtering capacity Droughty	1.00 1.00 1.00 0.99 0.15
Torhunta-----	30	Very limited Depth to saturated zone Flooding Filtering capacity Too acid Runoff	1.00 1.00 0.99 0.78 0.40	Very limited Depth to saturated zone Flooding Too acid Filtering capacity Droughty	1.00 1.00 1.00 0.99 0.01
Croatan-----	25	Very limited Ponding Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 1.00 1.00 0.40	Very limited Ponding Depth to saturated zone Flooding Low adsorption Too acid	1.00 1.00 1.00 1.00 1.00
48: Meadowbrook-----	60	Very limited Depth to saturated zone Filtering capacity Leaching Too acid	1.00 0.99 0.70 0.22	Very limited Depth to saturated zone Filtering capacity Too acid	1.00 0.99 0.77

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
48: Meadowbrook, hydric-	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
49: Meadowbrook, slough-	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
54: Pelham-----	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Leaching	0.70	Low adsorption	0.01
		Low adsorption	0.08		
Pelham, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Runoff	0.40	Low adsorption	0.01
		Low adsorption	0.08		
55: Plummer-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Leaching	0.70		
		Low adsorption	0.01		
Plummer, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Runoff	0.40		
		Low adsorption	0.01		

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
56: Pottsburg-----	60	Very limited Depth to saturated zone Filtering capacity Leaching Too acid	1.00 0.99 0.70 0.43	Very limited Depth to saturated zone Filtering capacity Too acid	1.00 0.99 0.99
Pottsburg, hydric---	20	Very limited Depth to saturated zone Filtering capacity Leaching Too acid	1.00 0.99 0.70 0.43	Very limited Depth to saturated zone Filtering capacity Too acid	1.00 0.99 0.99
57: Surrency-----	35	Very limited Ponding Depth to saturated zone Too acid Runoff	1.00 1.00 0.73 0.40	Very limited Ponding Depth to saturated zone Too acid	1.00 1.00 1.00
Pantego-----	30	Very limited Ponding Depth to saturated zone Too acid Runoff	1.00 1.00 0.78 0.40	Very limited Ponding Depth to saturated zone Too acid	1.00 1.00 1.00
Croatan-----	25	Very limited Ponding Depth to saturated zone Too acid Runoff	1.00 1.00 1.00 0.40	Very limited Ponding Depth to saturated zone Low adsorption Too acid	1.00 1.00 1.00 1.00
58: Rutlege-----	35	Very limited Depth to saturated zone Flooding Filtering capacity Too acid Runoff	1.00 1.00 0.99 0.73 0.40	Very limited Depth to saturated zone Flooding Too acid Filtering capacity Droughty	1.00 1.00 1.00 0.99 0.35
Bibb-----	30	Very limited Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 0.73 0.40	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
58: Surrency-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Too acid	0.73	Too acid	1.00
		Runoff	0.40		
59: Hosford-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Runoff	0.40		
60: Sapelo-----	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Leaching	0.70		
Sapelo, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
		Runoff	0.40		
61: Osier-----	80	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching	0.90	Too acid	1.00
		Too acid	0.62	Droughty	0.58
		Droughty	0.58		
62: Scranton, slough----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.90	Too acid	0.77
		Too acid	0.22	Droughty	0.10

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
63: Stilson-----	85	Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid	0.99 0.68 0.51 0.50	Very limited Filtering capacity Too acid Depth to saturated zone Low adsorption	0.99 0.99 0.68 0.22
65: Pickney-----	40	Very limited Filtering capacity Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 1.00 0.73 0.40	Very limited Filtering capacity Depth to saturated zone Flooding Too acid Droughty	1.00 1.00 1.00 1.00 0.08
Bibb-----	25	Very limited Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 0.73 0.40	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 1.00
Dorovan-----	25	Very limited Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 0.94 0.40	Very limited Depth to saturated zone Flooding Low adsorption Too acid	1.00 1.00 1.00 1.00
66: Wahee-----	45	Very limited Slow water movement Flooding Depth to saturated zone Too acid	1.00 1.00 0.99 0.32	Very limited Flooding Slow water movement Depth to saturated zone Too acid	1.00 1.00 0.99 0.91
Ochlockonee-----	35	Very limited Flooding Filtering capacity Too acid	1.00 0.99 0.22	Very limited Flooding Filtering capacity Too acid	1.00 0.99 0.77
67: Goldhead-----	85	Very limited Filtering capacity Depth to saturated zone Leaching Too acid	1.00 1.00 0.70 0.02	Very limited Filtering capacity Depth to saturated zone Too acid	1.00 1.00 0.07

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
68: Goldhead-----	45	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Runoff	0.40	Too acid	0.07
		Too acid	0.02		
Meadowbrook-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
69: Troup-----	85	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Low adsorption	0.99	Low adsorption	0.95
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
70: Troup-----	85	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Low adsorption	0.99	Low adsorption	0.97
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
71: Pits-----	98	Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope	1.00	Very limited Slope	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Droughty	0.70	Too acid	0.91
		Leaching	0.45	Droughty	0.70
		Too acid	0.32		
73: Foxworth-----	45	Very limited Slope	1.00	Very limited Slope	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
73: Hosford-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Too acid Filtering capacity	1.00 0.99
		Too acid	0.73	Slope	0.01
		Runoff	0.40		
		Slope	0.01		
Lucy-----	20	Very limited Slope	1.00	Very limited Slope	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.45	Too acid	0.67
		Low adsorption	0.42		
		Too acid	0.18		
74: Garcon-----	40	Very limited Filtering capacity	0.99	Very limited Flooding	1.00
		Depth to saturated zone	0.95	Filtering capacity	0.99
		Flooding	0.60	Too acid	0.99
		Too acid	0.50	Depth to saturated zone	0.95
Ochlockonee-----	25	Very limited Filtering capacity	0.99	Very limited Flooding	1.00
		Flooding	0.60	Filtering capacity	0.99
		Too acid	0.22	Too acid	0.77
Ousley-----	25	Very limited Filtering capacity	0.99	Very limited Flooding	1.00
		Depth to saturated zone	0.95	Filtering capacity	0.99
		Droughty	0.94	Depth to saturated zone	0.95
		Flooding	0.60	Droughty	0.94
		Too acid	0.32	Too acid	0.91
75: Brantley-----	35	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
		Slope	1.00	Slope	1.00
		Too acid	0.22	Too acid	0.77
Okeelala-----	30	Very limited Slope	1.00	Very limited Slope	1.00
		Too acid	0.50	Too acid	0.99
Lucy-----	25	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Slope	0.63	Too acid	0.67
		Leaching	0.45	Slope	0.63
		Low adsorption	0.42		
		Too acid	0.18		

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
78: Lucy-----	35	Very limited Slope Filtering capacity Leaching Low adsorption Too acid	1.00 0.99 0.45 0.42 0.18	Very limited Slope Filtering capacity Too acid	1.00 0.99 0.67
Blanton-----	30	Very limited Slope Filtering capacity Low adsorption Leaching Too acid	1.00 0.99 0.52 0.45 0.32	Very limited Slope Filtering capacity Too acid Low adsorption Droughty	1.00 0.99 0.91 0.54 0.01
Cowarts-----	25	Very limited Slope Slow water movement Too acid Low adsorption Filtering capacity	1.00 0.75 0.50 0.19 0.01	Very limited Slope Too acid Slow water movement Low adsorption Filtering capacity	1.00 0.99 0.61 0.56 0.01
81: Scranton-----	85	Very limited Depth to saturated zone Filtering capacity Leaching Too acid Droughty	1.00 0.99 0.90 0.22 0.13	Very limited Depth to saturated zone Filtering capacity Too acid Droughty	1.00 0.99 0.77 0.13
82: Brickyard-----	55	Very limited Slow water movement Depth to saturated zone Flooding Runoff	1.00 1.00 1.00 0.40	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 1.00
Chowan-----	35	Very limited Depth to saturated zone Flooding Too acid Slow water movement Runoff	1.00 1.00 0.68 0.50 0.40	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 1.00 0.37

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
83: Plummer, hydric-----	40	Very limited Depth to saturated zone Filtering capacity Too acid Runoff Low adsorption	1.00 0.99 0.73 0.40 0.01	Very limited Depth to saturated zone Too acid Filtering capacity	1.00 1.00 0.99
Sapelo-----	30	Very limited Depth to saturated zone Filtering capacity Too acid Leaching	1.00 0.99 0.73 0.70	Very limited Depth to saturated zone Too acid Filtering capacity	1.00 1.00 0.99
Pottsburg-----	20	Very limited Depth to saturated zone Filtering capacity Leaching Too acid	1.00 0.99 0.70 0.43	Very limited Depth to saturated zone Filtering capacity Too acid	1.00 0.99 0.99
91: Woodington-----	85	Very limited Depth to saturated zone Filtering capacity Too acid Leaching	1.00 0.99 0.78 0.70	Very limited Depth to saturated zone Too acid Filtering capacity	1.00 1.00 0.99
92: Pamlico-----	50	Very limited Ponding Depth to saturated zone Flooding Filtering capacity Too acid	1.00 1.00 1.00 0.99 0.73	Very limited Ponding Depth to saturated zone Flooding Low adsorption Too acid	1.00 1.00 1.00 1.00 1.00
Pickney-----	45	Very limited Filtering capacity Ponding Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 1.00 0.73	Very limited Filtering capacity Ponding Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 1.00
95: Bibb-----	35	Very limited Depth to saturated zone Too acid Flooding Runoff	1.00 0.73 0.60 0.40	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
95: Rains-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00
		Runoff	0.40	Too acid	0.77
		Too acid	0.22		
Garcon-----	20	Very limited Filtering capacity	0.99	Very limited Flooding	1.00
		Depth to saturated zone	0.95	Filtering capacity	0.99
		Flooding	0.60	Too acid	0.99
		Too acid	0.50	Depth to saturated zone	0.95
96: Foxworth-----	50	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
Lakeland-----	35	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Droughty	0.70	Too acid	0.91
		Leaching	0.45	Droughty	0.70
		Too acid	0.32		
97: Foxworth-----	50	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Leaching	0.45	Too acid	0.91
		Too acid	0.32		
Lakeland-----	35	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Droughty	0.70	Too acid	0.91
		Slope	0.63	Droughty	0.70
		Leaching	0.45	Slope	0.63
		Too acid	0.32		
98: Leon-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Leaching	0.70	Too acid	0.99
		Too acid	0.43		
Chipley-----	30	Very limited Filtering capacity	0.99	Very limited Too acid	1.00
		Depth to saturated zone	0.99	Filtering capacity	0.99
		Too acid	0.62	Depth to saturated zone	0.99
		Droughty	0.23	Droughty	0.23

Soil Survey of Liberty County, Florida

Table 6.--Agricultural Waste Management--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
98: Leon, hydric-----	20	Not rated		Very limited Depth to saturated zone	1.00
				Filtering capacity	0.99
				Too acid	0.99
99: Water-----	100	Not rated		Not rated	
101: Albany-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
		Too acid	0.43	Too acid	0.99
		Droughty	0.01	Droughty	0.01
Blanton-----	35	Very limited Filtering capacity	0.99	Very limited Filtering capacity	0.99
		Low adsorption	0.52	Too acid	0.91
		Leaching	0.45	Low adsorption	0.54
		Too acid	0.32	Droughty	0.01
		Droughty	0.01		

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
2: Albany-----	Loblolly pine-----	95	143	Loblolly pine, slash pine
	Slash pine-----	85	157	
	Longleaf pine-----	80	100	
	White oak-----	---	---	
	Pignut hickory-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	
4: Alpin-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	85	114	
	Longleaf pine-----	70	86	
	Bluejack oak-----	---	---	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Foxworth-----	Slash pine-----	80	143	Slash pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
5: Rains-----	Loblolly pine-----	94	143	Loblolly pine
	Sweetgum-----	90	100	
Bladen-----	Loblolly pine-----	94	129	Loblolly pine, slash pine
	Slash pine-----	91	172	
	Sweetgum-----	90	100	
6: Blanton-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	Bluejack oak-----	---	---	
	Turkey oak-----	---	---	
	Live oak-----	---	---	
	American beech-----	---	---	
7: Blanton-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	Bluejack oak-----	---	---	
	Turkey oak-----	---	---	
	Live oak-----	---	---	
	American beech-----	---	---	
8: Brickyard-----	Atlantic white cedar	---	---	---
	Bald cypress-----	---	---	
	Overcup oak-----	---	---	
	Slash pine-----	---	---	
	Water oak-----	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
9: Centenary-----	Loblolly pine-----	85	114	Loblolly pine, slash pine
	Longleaf pine-----	72	86	
	Slash pine-----	85	157	
11: Chipley-----	Slash pine-----	85	157	Loblolly pine, slash pine
	Longleaf pine-----	80	100	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
12: Rutlege-----	Pond cypress-----	75	29	---
	Blackgum-----	---	100	
	Water tupelo-----	---	---	
	Sweetbay-----	---	---	
	Sweetgum-----	---	---	
	Red maple-----	---	---	
Plummer-----	Bald cypress-----	108	100	---
	Pond pine-----	60	---	
	Swamp tupelo-----	---	---	
13: Dorovan-----	Blackgum-----	70	100	---
	Bald cypress-----	---	---	
	Red maple-----	---	---	
	Green ash-----	---	---	
	Sweetbay-----	---	---	
	Water tupelo-----	---	---	
	Swamp tupelo-----	---	---	
Pamlico-----	Pond pine-----	55	---	---
	Bald cypress-----	---	---	
	Water tupelo-----	---	---	
	Sweetbay-----	---	---	
14: Dothan-----	Slash pine-----	92	172	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	88	129	
	Longleaf pine-----	84	114	
	Hickory-----	---	---	
	Water oak-----	---	---	
15: Dothan-----	Slash pine-----	92	172	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	88	129	
	Longleaf pine-----	84	114	
	Hickory-----	---	---	
	Water oak-----	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
17: Dothan-----	Slash pine-----	92	172	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	88	129	
	Longleaf pine-----	84	114	
	Hickory-----	---	---	
	Water oak-----	---	---	
Fuquay-----	Slash pine-----	93	172	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	85	114	
	Longleaf pine-----	77	100	
	White oak-----	---	---	
	American beech-----	---	---	
24: Goldsboro-----	Loblolly pine-----	90	129	Loblolly pine, slash pine, longleaf pine
	Longleaf pine-----	77	86	
	Slash pine-----	93	172	
	Sweetgum-----	90	---	
	Southern red oak-----	---	---	
	Water oak-----	---	---	
25: Goldsboro-----	Loblolly pine-----	90	129	Loblolly pine, slash pine, longleaf pine
	Longleaf pine-----	77	86	
	Slash pine-----	93	172	
	Sweetgum-----	90	---	
	Southern red oak-----	---	---	
	Water oak-----	---	---	
26: Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
27: Fuquay-----	Slash pine-----	93	172	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	85	114	
	Longleaf pine-----	77	100	
	White oak-----	---	---	
	American beech-----	---	---	
30: Elloree-----	Loblolly pine-----	90	129	Loblolly pine,
	Red maple-----	---	---	
	Sweetgum-----	---	---	
	Water oak-----	---	---	
	Yellow poplar-----	---	---	
Bibb-----	Loblolly pine-----	100	157	---
	Water oak-----	90	86	
	Sweetgum-----	90	100	
	Blackgum-----	---	---	
	Yellow poplar-----	---	---	
	Atlantic white cedar-----	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
30: Meggett-----	Slash pine-----	100	186	Loblolly pine, slash pine
	Loblolly pine-----	100	157	
	Pond pine-----	75	---	
31: Hurricane-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	75	86	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Chipley-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	80	100	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
32: Plummer-----	Bald cypress-----	108	100	---
	Pond pine-----	60	---	
	Swamp tupelo-----	---	---	
Pelham-----	Slash pine-----	85	157	Loblolly pine, slash pine
	Loblolly pine-----	85	129	
	Sweetgum-----	85	100	
	Blackgum-----	85	129	
	Water oak-----	85	86	
	Pond pine-----	---	---	
	Swamp tupelo-----	---	---	
	Bald cypress-----	---	---	
34: Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
35: Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
36: Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
37: Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
38: Leefield-----	Slash pine-----	84	157	Loblolly pine, slash pine
	Loblolly pine-----	84	114	
	Longleaf pine-----	70	86	
	White oak-----	---	---	
	Pignut hickory-----	---	---	
39: Leon-----	Longleaf pine-----	65	72	Slash pine
	Slash pine-----	70	114	
Leon, hydric.				
42: Lucy-----	Slash pine-----	84	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	White oak-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	
44: Lynchburg-----	Yellow poplar-----	92	86	Loblolly pine,
	Sweetgum-----	90	100	
	Loblolly pine-----	86	129	
	Longleaf pine-----	74	86	
	Blackgum-----	---	---	
	White oak-----	---	---	
	Southern red oak---	---	100	
45: Lynn Haven-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
46: Hurricane-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	75	86	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Leon-----	Longleaf pine-----	65	72	Slash pine
	Slash pine-----	70	114	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
46: Albany-----	Loblolly pine-----	95	143	Loblolly pine, slash pine
	Slash pine-----	85	157	
	Longleaf pine-----	80	100	
	White oak-----	---	---	
	Pignut hickory-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	
47: Torhunta-----	Loblolly pine-----	87	129	Loblolly pine
	Pond pine-----	70	57	
	Water tupelo-----	---	---	
	Sweetgum-----	---	---	
	Willow oak-----	---	---	
	Water oak-----	---	---	
Lynn Haven-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
Croatan-----	Loblolly pine-----	---	---	---
48: Meadowbrook-----	Loblolly pine-----	91	129	Loblolly pine, slash pine
	Slash pine-----	88	157	
	Sweetgum-----	---	---	
	Red maple-----	---	---	
	Blackgum-----	---	---	
	Water oak-----	---	---	
	Laurel oak-----	---	---	
Meadowbrook, hydric----	Loblolly pine-----	91	129	---
	Slash pine-----	88	157	
	Sweetgum-----	---	---	
	Red maple-----	---	---	
	Blackgum-----	---	---	
	Water oak-----	---	---	
	Laurel oak-----	---	---	
49: Meadowbrook, slough----	Loblolly pine-----	91	129	Loblolly pine, slash pine
	Slash pine-----	88	157	
	Longleaf pine-----	70	86	
	Water oak-----	---	---	
	Live oak-----	---	---	
54: Pelham-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	80	100	
	Sweetgum-----	80	86	
	Blackgum-----	80	114	
	Water oak-----	80	72	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
54: Pelham, hydric-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	80	100	
	Sweetgum-----	80	86	
	Blackgum-----	80	114	
	Water oak-----	80	72	
55: Plummer-----	Loblolly pine-----	91	129	Loblolly pine, slash pine
	Slash pine-----	88	157	
	Longleaf pine-----	70	86	
Plummer, hydric-----	Loblolly pine-----	91	129	Loblolly pine, slash pine
	Slash pine-----	88	157	
	Longleaf pine-----	70	86	
56: Pottsburg-----	Slash pine-----	70	114	Loblolly pine, slash pine,
	Loblolly pine-----	70	86	
	Longleaf pine-----	60	57	
	Water oak-----	---	---	
	Live oak-----	---	---	
Pottsburg, hydric-----	Slash pine-----	75	129	Loblolly pine, slash pine
	Loblolly pine-----	70	86	
	Longleaf pine-----	60	57	
	Water oak-----	---	---	
	Live oak-----	---	---	
57: Surrency, depressional--	Loblolly pine-----	95	143	---
	Slash pine-----	90	157	
	Sweetgum-----	90	100	
	Water tupelo-----	---	---	
	Blackgum-----	---	---	
	Cypress-----	---	---	
Pantego, depressional---	Pond cypress-----	75	29	---
	Bald cypress-----	---	---	
	Pond pine-----	---	---	
	Red maple-----	---	---	
	Sweetbay-----	---	---	
	Water tupelo-----	---	---	
Croatan, depressional---	Water tupelo-----	60	86	---
	Swamp tupelo-----	---	---	
	Bald cypress-----	---	---	
	Atlantic white cedar	---	---	
58: Rutlege-----	Bald cypress-----	100	86	---
	Sweetgum-----	90	100	
	Loblolly pine-----	90	129	
	Pin oak-----	85	72	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
58: Bibb-----	Loblolly pine-----	100	157	---
	Water oak-----	90	86	
	Sweetgum-----	90	100	
	Blackgum-----	---	---	
	Yellow poplar-----	---	---	
	Atlantic white cedar-----	---	---	
Surrency-----	Loblolly pine-----	95	143	---
	Slash pine-----	90	157	
	Sweetgum-----	90	100	
	Water tupelo-----	---	---	
	Blackgum-----	---	---	
	Cypress-----	---	---	
59: Hosford-----	Bald cypress-----	100	86	Loblolly pine
	Sweetgum-----	90	100	
	Loblolly pine-----	90	129	
	Pin oak-----	85	72	
60: Sapelo-----	Slash pine-----	77	143	Loblolly pine, slash pine
	Loblolly pine-----	77	100	
	Longleaf pine-----	65	72	
Sapelo, hydric-----	Slash pine-----	77	143	Slash pine
	Loblolly pine-----	77	100	
	Longleaf pine-----	65	72	
61: Osier-----	Loblolly pine-----	87	129	Loblolly pine, slash pine
	Slash pine-----	85	157	
	Longleaf pine-----	69	72	
62: Scranton-----	Slash pine-----	84	157	Loblolly pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	Sweetgum-----	---	---	
63: Stilson-----	Loblolly pine-----	95	129	Loblolly pine, longleaf pine, slash pine
	Longleaf pine-----	80	100	
	Slash pine-----	95	172	
	Sweetgum-----	---	---	
65: Pickney-----	Sweetgum-----	90	100	---
	Yellow poplar-----	---	---	
	Water tupelo-----	---	---	
	Blackgum-----	---	---	
	Pond pine-----	---	---	
	Bald cypress-----	---	---	
	Water oak-----	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
65: Dorovan-----	Blackgum-----	70	100	Bald cypress
	Bald cypress-----	---	---	
	Red maple-----	---	---	
	Green ash-----	---	---	
	Sweetbay-----	---	---	
	Water tupelo-----	---	---	
	Swamp tupelo-----	---	---	
Bibb-----	Loblolly pine-----	100	157	---
	Water oak-----	90	86	
	Sweetgum-----	90	100	
	Blackgum-----	---	---	
	Yellow poplar-----	---	---	
	Atlantic white cedar-----	---	---	
66: Wahee-----	Sweetgum-----	90	---	Loblolly pine, slash pine
	Loblolly pine-----	86	---	
	Slash pine-----	86	---	
Ochlockonee-----	Yellow poplar-----	110	---	Loblolly pine, slash pine
	Loblolly pine-----	100	---	
	Slash pine-----	100	---	
67: Goldhead-----	Loblolly pine-----	90	129	Loblolly pine, slash pine
	Slash pine-----	80	143	
	Longleaf pine-----	65	72	
	Sweetgum-----	---	---	
	Blackgum-----	---	---	
	Laurel oak-----	---	---	
	Water oak-----	---	---	
	Cabbage palmetto-----	---	---	
68: Goldhead-----	Bald cypress-----	108	100	---
	Pond cypress-----	75	43	
	Pond pine-----	---	---	
	Sweetgum-----	---	---	
Meadowbrook-----	Bald cypress-----	108	100	---
	Pond cypress-----	75	29	
	Pond pine-----	---	---	
	Sweetgum-----	---	---	
69: Troup-----	Slash pine-----	84	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
70: Troup-----	Slash pine-----	84	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
71: Pits.				

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
72: Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
73: Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
Hosford-----	Bald cypress-----	---	---	---
	Sweetgum-----	90	100	
	Water tupelo-----	---	---	
Lucy-----	Loblolly pine-----	80	114	Loblolly pine, longleaf pine, slash pine
	Longleaf pine-----	70	86	
	Slash pine-----	84	157	
74: Garcon-----	Slash pine-----	80	143	Slash pine
	Longleaf pine-----	70	86	
Ochlockonee-----	Yellow poplar-----	110	---	Loblolly pine, slash pine
	Slash pine-----	100	---	
	Loblolly pine-----	100	---	
Ousley-----	Slash pine-----	80	143	Loblolly pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
75: Brantley-----	Loblolly pine-----	85	114	Loblolly pine
	Shortleaf pine-----	70	114	
Okeelala-----	Loblolly pine-----	90	114	Loblolly pine, longleaf pine
	Longleaf pine-----	70	114	
Lucy-----	Slash pine-----	84	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	White oak-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	
78: Lucy-----	Slash pine-----	84	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	White oak-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
78: Blanton-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Bluejack oak-----	---	---	
	Longleaf pine-----	70	86	
	Turkey oak-----	---	---	
	Live oak-----	---	---	
	American beech-----	---	---	
Cowarts-----	Loblolly pine-----	86	123	Loblolly pine, slash pine
	Slash pine-----	86	155	
	Longleaf pine-----	67	72	
	American beech-----	---	---	
	Black cherry-----	---	---	
	Hickory-----	---	---	
	Magnolia-----	---	---	
	Southern red oak----	---	---	
81: Scranton-----	Slash pine-----	84	157	Loblolly pine, slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	70	86	
	Sweetgum-----	---	---	
82: Brickyard-----	Atlantic white cedar	---	---	---
	Bald cypress-----	---	---	
	Overcup oak-----	---	---	
	Slash pine-----	---	---	
	Water oak-----	---	---	
Chowan-----	Atlantic white cedar	---	---	---
	Bald cypress-----	---	---	
	Green ash-----	98	86	
	Pond pine-----	---	---	
	Red maple-----	---	---	
	Sweetgum-----	---	---	
	Water tupelo-----	84	129	
83: Plummer, hydric-----	Loblolly pine-----	91	129	Loblolly pine, slash pine
	Slash pine-----	88	157	
	Longleaf pine-----	70	86	
Sapelo-----	Slash pine-----	77	143	Loblolly pine, slash pine
	Loblolly pine-----	77	100	
	Longleaf pine-----	65	72	
Pottsburg-----	Slash pine-----	70	114	Loblolly pine, slash pine
	Loblolly pine-----	70	86	
	Longleaf pine-----	60	57	
	Water oak-----	---	---	
	Live oak-----	---	---	
91: Woodington-----	Slash pine-----	88	157	Slash pine
92: Pamlico-----	Loblolly pine-----	---	---	---

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
92: Pickney-----	Sweetgum-----	90	100	---
	Yellow poplar-----	---	---	
	Water tupelo-----	---	---	
	Blackgum-----	---	---	
	Pond pine-----	---	---	
	Water oak-----	---	---	
	Bald cypress-----	---	---	
95: Bibb-----	Loblolly pine-----	100	157	---
	Water oak-----	90	86	
	Sweetgum-----	90	100	
	Blackgum-----	---	---	
	Yellow poplar-----	---	---	
	Atlantic white cedar	---	---	
Rains-----	Loblolly pine-----	94	143	Loblolly pine
	Sweetgum-----	90	100	
Garcon-----	Longleaf pine-----	70	86	Slash pine
	Slash pine-----	80	143	
96: Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
97: Foxworth-----	Slash pine-----	80	143	Slash pine, longleaf pine
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Post oak-----	---	---	
	Bluejack oak-----	---	---	
	Laurel oak-----	---	---	
Lakeland-----	Slash pine-----	80	143	Loblolly pine, longleaf pine slash pine
	Loblolly pine-----	80	114	
	Longleaf pine-----	65	72	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
98: Leon-----	Longleaf pine-----	65	72	Slash pine
	Slash pine-----	70	114	

Soil Survey of Liberty County, Florida

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
98: Chipley-----	Slash pine-----	90	157	Loblolly pine, slash pine
	Loblolly pine-----	90	129	
	Longleaf pine-----	80	100	
	Turkey oak-----	---	---	
	Blackjack oak-----	---	---	
	Post oak-----	---	---	
Leon, hydric.				
99: Water.				
101: Albany-----	Loblolly pine-----	95	143	Loblolly pine, slash pine
	Longleaf pine-----	80	100	
	Slash pine-----	85	157	
	White oak-----	---	---	
	Pignut hickory-----	---	---	
	American beech-----	---	---	
	Flowering dogwood---	---	---	
Blanton-----	Slash pine-----	90	157	Loblolly pine, longleaf pine, slash pine
	Loblolly pine-----	80	114	
	Bluejack oak-----	---	---	
	Longleaf pine-----	70	86	
	Turkey oak-----	---	---	
	Live oak-----	---	---	
	American beech-----	---	---	

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. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
2: Albany-----	85	Slight		Moderate Low strength	0.50	Slight		Moderately suited Wetness	0.50
4: Alpin-----	45	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Sandiness Slope	0.50 0.50
Foxworth-----	40	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Sandiness Slope	0.50 0.50
5: Rains-----	50	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
Bladen-----	45	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
6: Blanton-----	85	Slight		Moderate Low strength	0.50	Slight		Well suited	
7: Blanton-----	80	Slight		Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
8: Brickyard-----	75	Severe Flooding Low strength	1.00 0.50	Severe Low strength	1.00	Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
9: Centenary-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
11: Chipley-----	50	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
Foxworth-----	40	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
12: Rutlege-----	45	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00
Plummer-----	40	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00
13: Dorovan-----	50	Slight		Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Ponding Low strength Wetness	1.00 1.00 1.00
Pamlico-----	45	Moderate Sandiness	0.50	Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Ponding Low strength Wetness Sandiness	1.00 1.00 1.00 0.50
14: Dothan-----	84	Slight		Moderate Low strength	0.50	Slight		Well suited	
15: Dothan-----	85	Slight		Moderate Low strength	0.50	Slight		Well suited	
17: Dothan-----	40	Slight		Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
Fuquay-----	35	Slight		Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
24: Goldsboro-----	90	Slight		Moderate Low strength	0.50	Slight		Well suited	
25: Goldsboro-----	90	Slight		Moderate Low strength	0.50	Slight		Well suited	
26: Foxworth-----	80	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
27: Fuquay-----	85	Slight		Moderate Low strength	0.50	Slight		Well suited	
30: Elloree-----	35	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Bibb-----	30	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Meggett-----	25	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
31: Hurricane-----	45	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
Chipley-----	35	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
32: Plummer-----	45	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00
Pelham-----	40	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
34: Lakeland-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
35: Lakeland-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Sandiness Slope	0.50 0.50
36: Lakeland-----	90	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Sandiness	0.50 0.50
37: Lakeland-----	50	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Sandiness	1.00 0.50
Foxworth-----	40	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Sandiness	1.00 0.50
38: Leefield-----	85	Slight		Moderate Low strength	0.50	Slight		Well suited	
39: Leon, nonhydic-----	70	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
Leon, hydic-----	20	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
42: Lucy-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
44: Lynchburg-----	80	Slight		Moderate Low strength	0.50	Slight		Moderately suited Wetness	0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
45: Lynn Haven-----	90	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
46: Hurricane-----	35	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
Leon-----	30	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
Albany-----	25	Slight		Moderate Low strength	0.50	Slight		Moderately suited Wetness	0.50
47: Torhunta-----	35	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Lynn Haven-----	30	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness Sandiness	1.00 1.00 0.50
Croatan-----	25	Severe Flooding	1.00	Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Ponding Flooding Low strength Wetness	1.00 1.00 1.00 1.00
48: Meadowbrook, nonhydic-----	75	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
Meadowbrook, hydric--	15	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
49: Meadowbrook, slough--	85	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness Sandiness	1.00 1.00 0.50
54: Pelham, nonhydric----	65	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
Pelham, hydric-----	20	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
55: Plummer, nonhydric---	60	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
Plummer, hydric-----	20	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
56: Pottsburg, nonhydric-	60	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
Pottsburg, hydric----	20	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
57: Surrency-----	35	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00
Pantego-----	30	Slight		Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness	1.00 1.00
Croatan-----	25	Slight		Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Ponding Low strength Wetness	1.00 1.00 1.00

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
58: Rutlege-----	35	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Bibb-----	30	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Surrency-----	25	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding	1.00
59: Hosford-----	80	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Wetness Sandiness	1.00 0.50
60: Sapelo, nonhydric----	65	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
Sapelo, hydric-----	20	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
61: Osier-----	80	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
62: Scranton, slough-----	90	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
63: Stilson-----	85	Slight		Moderate Low strength	0.50	Slight		Well suited	

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
65: Pickney-----	40	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Bibb-----	25	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Dorovan-----	25	Severe Flooding	1.00	Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Flooding Low strength Wetness	1.00 1.00 1.00
66: Wahee-----	45	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding	1.00
Ochlockonee-----	35	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding	1.00
67: Goldhead-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
68: Goldhead-----	45	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness Sandiness	1.00 1.00 0.50
Meadowbrook-----	40	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Ponding Wetness Sandiness	1.00 1.00 0.50
69: Troup-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
70: Troup-----	80	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Sandiness Slope	0.50 0.50
71: Pits-----	98	Not rated		Not rated		Not rated		Not rated	
72: Lakeland-----	75	Severe Slope	1.00	Moderate Low strength	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Sandiness	1.00 0.50
73: Foxworth-----	45	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Sandiness	1.00 0.50
Hosford-----	25	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Wetness Sandiness Slope	1.00 0.50 0.50
Lucy-----	20	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Sandiness	1.00 0.50
74: Garcon-----	40	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Sandiness	1.00 0.50
Ochlockonee-----	25	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding	1.00
Ousley-----	25	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Sandiness	1.00 0.50
75: Brantley-----	35	Moderate Slope	0.50	Moderate Low strength	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
75: Okeelala-----	30	Moderate Slope	0.50	Moderate Low strength	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Lucy-----	25	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Sandiness	0.50 0.50
78: Lucy-----	35	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Sandiness	1.00 0.50
Blanton-----	30	Moderate Slope Sandiness	0.50 0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
Cowarts-----	25	Moderate Slope	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
81: Scranton-----	85	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
82: Brickyard-----	55	Severe Flooding Low strength	1.00 0.50	Severe Low strength	1.00	Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
Chowan-----	35	Severe Flooding Low strength	1.00 0.50	Severe Low strength	1.00	Slight		Poorly suited Flooding Low strength	1.00 1.00
83: Plummer-----	35	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
Sapelo-----	30	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
83: Pottsburg-----	25	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
91: Woodington-----	90	Slight		Moderate Low strength	0.50	Slight		Poorly suited Wetness	1.00
92: Pamlico-----	50	Severe Flooding Sandiness	1.00 0.50	Severe Low strength	1.00	Very Severe Organic matter content high	1.00	Poorly suited Ponding Flooding Low strength Wetness Sandiness	1.00 1.00 1.00 1.00 0.50
Pickney-----	35	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Ponding Flooding Wetness	1.00 1.00 1.00
95: Bibb-----	40	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Rains-----	25	Severe Flooding	1.00	Moderate Low strength	0.50	Slight		Poorly suited Flooding Wetness	1.00 1.00
Garcon-----	25	Severe Flooding Sandiness	1.00 0.50	Moderate Low strength	0.50	Slight		Poorly suited Flooding Sandiness	1.00 0.50
96: Foxworth-----	50	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
Lakeland-----	40	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Soil rutting hazard		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	Rating class and limiting features	Value
97: Foxworth-----	45	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Sandiness Slope	0.50 0.50
Lakeland-----	40	Moderate Sandiness	0.50	Moderate Low strength	0.50	Moderate Slope/erodibility	0.50	Moderately suited Slope Sandiness	0.50 0.50
98: Leon, nonhydric-----	45	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Wetness Sandiness	0.50 0.50
Chipley-----	30	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Moderately suited Sandiness	0.50
Leon, hydric-----	5	Moderate Sandiness	0.50	Moderate Low strength	0.50	Slight		Poorly suited Wetness Sandiness	1.00 0.50
99: Water-----	100	Not rated		Not rated		Not rated		Not rated	
101: Albany-----	55	Slight		Moderate Low strength	0.50	Slight		Moderately suited Wetness	0.50
Blanton-----	30	Slight		Moderate Low strength	0.50	Slight		Well suited	

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. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Well suited		Well suited		Well suited		Moderate Available water	0.50
4: Alpin-----	45	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
Foxworth-----	40	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
5: Rains-----	50	Well suited		Well suited		Well suited		High Wetness	1.00
Bladen-----	45	Well suited		Well suited		Well suited		High Wetness	1.00
6: Blanton-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
7: Blanton-----	80	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
8: Brickyard-----	75	Moderately suited Stickiness; high plasticity index	0.50	Poorly suited Stickiness; high plasticity index	0.50	Well suited		High Wetness	1.00
9: Centenary-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11: Chipley-----	50	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
Foxworth-----	40	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
12: Rutlege-----	45	Well suited		Well suited		Well suited		High Wetness	1.00
Plummer-----	40	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
13: Dorovan-----	50	Well suited		Well suited		Well suited		High Wetness Soil reaction	1.00 0.50
Pamlico-----	45	Well suited		Well suited		Well suited		High Wetness	1.00
14: Dothan-----	84	Well suited		Well suited		Well suited		Low	
15: Dothan-----	85	Well suited		Well suited		Well suited		Low	
17: Dothan-----	40	Moderately suited Slope	0.50	Well suited		Well suited		Low	
Fuquay-----	35	Moderately suited Slope	0.50	Well suited		Well suited		Low	
24: Goldsboro-----	90	Well suited		Well suited		Well suited		Low	
25: Goldsboro-----	90	Well suited		Well suited		Well suited		Low	
26: Foxworth-----	80	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
27: Fuquay-----	85	Well suited		Well suited		Well suited		Low	
30: Elloree-----	35	Well suited		Well suited		Well suited		High Wetness	1.00
Bibb-----	30	Well suited		Well suited		Well suited		High Wetness	1.00
Meggett-----	25	Well suited		Well suited		Well suited		High Wetness	1.00
31: Hurricane-----	45	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
Chipley-----	35	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
32: Plummer-----	45	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Pelham-----	40	Well suited		Well suited		Well suited		High Wetness	1.00
34: Lakeland-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
35: Lakeland-----	85	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
36: Lakeland-----	90	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
37: Lakeland-----	50	Poorly suited Slope Sandiness	0.75 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
Foxworth-----	40	Poorly suited Slope Sandiness	0.75 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
38: Leefield-----	85	Well suited		Well suited		Well suited		Low	
39: Leon, nonhydric----	70	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Leon, hydric-----	20	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
42: Lucy-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
44: Lynchburg-----	80	Well suited		Well suited		Well suited		High Wetness	1.00
45: Lynn Haven-----	90	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
46: Hurricane-----	35	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
Leon-----	30	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Albany-----	25	Well suited		Well suited		Well suited		Moderate Available water	0.50
47: Torhunta-----	35	Well suited		Well suited		Well suited		High Wetness	1.00

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
47: Lynn Haven-----	30	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Croatan-----	25	Well suited		Well suited		Well suited		High Wetness Soil reaction	1.00 1.00
48: Meadowbrook, nonhydic-----	75	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Meadowbrook, hydric-	15	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
49: Meadowbrook, slough-	85	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
54: Pelham, nonhydic---	65	Well suited		Well suited		Well suited		High Wetness	1.00
Pelham, hydric-----	20	Well suited		Well suited		Well suited		High Wetness	1.00
55: Plummer, nonhydic--	60	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Plummer, hydric-----	20	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
56: Pottsburg, nonhydic-----	60	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Pottsburg, hydric---	20	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
57: Surrency-----	35	Well suited		Well suited		Well suited		High Wetness	1.00

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57: Pantego-----	30	Well suited		Well suited		Well suited		High Wetness	1.00
Croatan-----	25	Well suited		Well suited		Well suited		High Wetness Soil reaction	1.00 1.00
58: Rutlege-----	35	Well suited		Well suited		Well suited		High Wetness	1.00
Bibb-----	30	Well suited		Well suited		Well suited		High Wetness	1.00
Surrency-----	25	Well suited		Well suited		Well suited		High Wetness	1.00
59: Hosford-----	80	Moderately suited Sandiness Slope	0.50 0.50	Well suited		Well suited		High Wetness	1.00
60: Sapelo, nonhydric---	65	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Sapelo, hydric-----	20	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
61: Osier-----	80	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
62: Scranton, slough----	90	Well suited		Well suited		Well suited		High Wetness	1.00
63: Stilson-----	85	Well suited		Well suited		Well suited		Low	

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65: Pickney-----	40	Well suited		Well suited		Well suited		High Wetness	1.00
Bibb-----	25	Well suited		Well suited		Well suited		High Wetness	1.00
Dorovan-----	25	Well suited		Well suited		Well suited		High Wetness Soil reaction	1.00 0.50
66: Wahee-----	45	Well suited		Well suited		Well suited		Moderate Wetness	0.50
Ochlockonee-----	35	Well suited		Well suited		Well suited		Low	
67: Goldhead-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
68: Goldhead-----	45	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Meadowbrook-----	40	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
69: Troup-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
70: Troup-----	80	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
71: Pits-----	98	Not rated		Not rated		Not rated		Not rated	

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
72: Lakeland-----	75	Unsuited Slope Sandiness	1.00 0.50	Unsuited Slope	1.00	Unsuited Slope	1.00	Moderate Available water	0.50
73: Foxworth-----	45	Moderately suited Slope Sandiness	0.50 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Low	
Hosford-----	25	Moderately suited Sandiness Slope	0.50 0.50	Well suited		Well suited		High Wetness	1.00
Lucy-----	20	Moderately suited Slope Sandiness	0.50 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Low	
74: Garcon-----	40	Well suited		Well suited		Well suited		Low	
Ochlockonee-----	25	Well suited		Well suited		Well suited		Low	
Ousley-----	25	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
75: Brantley-----	35	Poorly suited Slope	0.75	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
Okeelala-----	30	Poorly suited Slope	0.75	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
Lucy-----	25	Poorly suited Slope Sandiness	0.75 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
78: Lucy-----	45	Unsuited Slope Sandiness	1.00 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
78: Blanton-----	30	Unsuited Slope Sandiness	1.00 0.50	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
Cowarts-----	25	Poorly suited Slope	0.75	Poorly suited Slope	0.50	Poorly suited Slope	0.50	Moderate Available water	0.50
81: Scranton-----	85	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
82: Brickyard-----	55	Moderately suited Stickiness; high plasticity index	0.50	Poorly suited Stickiness; high plasticity index	0.50	Well suited		High Wetness	1.00
Chowan-----	35	Well suited		Well suited		Well suited		High Wetness Soil reaction	1.00 0.50
83: Plummer-----	35	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Sapelo-----	30	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Pottsburg-----	25	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
91: Woodington-----	90	Well suited		Well suited		Well suited		High Wetness	1.00
92: Pamlico-----	50	Well suited		Well suited		Well suited		High Wetness	1.00
Pickney-----	35	Well suited		Well suited		Well suited		High Wetness	1.00

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical planting		Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
95: Bibb-----	40	Well suited		Well suited		Well suited		High Wetness	1.00
Rains-----	25	Well suited		Well suited		Well suited		High Wetness	1.00
Garcon-----	25	Well suited		Well suited		Well suited		Low	
96: Foxworth-----	50	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
Lakeland-----	40	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
97: Foxworth-----	45	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
Lakeland-----	40	Moderately suited Slope Sandiness	0.50 0.50	Well suited		Well suited		Low	
98: Leon, nonhydric-----	45	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
Chipley-----	30	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	
Leon, hydric-----	5	Moderately suited Sandiness	0.50	Well suited		Well suited		High Wetness	1.00
99: Water-----	100	Not rated		Not rated		Not rated		Not rated	
101: Albany-----	55	Well suited		Well suited		Well suited		Moderate Available water	0.50
Blanton-----	30	Moderately suited Sandiness	0.50	Well suited		Well suited		Low	

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Very limited Too sandy Depth to saturated zone	1.00 0.81	Very limited Too sandy Depth to saturated zone	1.00 0.48	Very limited Too sandy Depth to saturated zone	1.00 0.81
4: Alpin-----	45	Very limited Too sandy Slope	1.00 0.04	Very limited Too sandy Slope	1.00 0.04	Very limited Too sandy Slope	1.00 1.00
Foxworth-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 1.00
5: Rains-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Bladen-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement	1.00 0.96
6: Blanton-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
7: Blanton-----	90	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 1.00
8: Brickyard-----	70	Very limited Depth to saturated zone Flooding Slow water	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00
9: Centenary-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
11: Chipley-----	50	Very limited Too sandy Depth to saturated zone	1.00 0.39	Very limited Too sandy Depth to saturated zone	1.00 0.19	Very limited Too sandy Depth to saturated zone	1.00 0.39

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
11: Foxworth-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
12: Rutlege-----	50	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 1.00	Very limited Too sandy Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00
Plummer-----	40	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99	Very limited Ponding Depth to saturated zone Too sandy	1.00 1.00 0.99	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99
13: Dorovan-----	50	Very limited Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
Pamlico-----	45	Very limited Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
14: Dothan-----	84	Somewhat limited Too sandy Slow water movement	0.65 0.26	Somewhat limited Too sandy Slow water movement	0.65 0.26	Somewhat limited Too sandy Slow water movement	0.65 0.26
15: Dothan-----	85	Somewhat limited Too sandy Slow water movement	0.65 0.26	Somewhat limited Too sandy Slow water movement	0.65 0.26	Somewhat limited Too sandy Slope Slow water movement	0.65 0.50 0.26
17: Dothan-----	40	Somewhat limited Too sandy Slow water movement Slope	0.65 0.26 0.16	Somewhat limited Too sandy Slow water movement Slope	0.65 0.26 0.16	Very limited Slope Too sandy Slow water movement	1.00 0.65 0.26
Fuquay-----	35	Somewhat limited Too sandy Slope	0.93 0.04	Somewhat limited Too sandy Slope	0.93 0.04	Very limited Slope Too sandy	1.00 0.93
24: Goldsboro-----	90	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy	0.94

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
25: Goldsboro-----	90	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy Slope	0.94 0.28
26: Foxworth-----	80	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
27: Fuquay-----	80	Somewhat limited Too sandy	0.93	Somewhat limited Too sandy	0.93	Somewhat limited Too sandy	0.93
30: Elloree-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Too sandy	0.90	Flooding	1.00
		Too sandy	0.90	Flooding	0.40	Too sandy	0.90
Bibb-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
Meggett-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.96	Flooding	1.00
		Slow water movement	0.96	Flooding	0.40	Slow water movement	0.96
		Too sandy	0.08	Too sandy	0.08	Too sandy	0.08
31: Hurricane-----	45	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
Chipley-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
32: Plummer-----	45	Very limited Depth to saturated zone	1.00	Very limited Ponding	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	0.99	Too sandy	0.99	Too sandy	0.99
Pelham-----	40	Very limited Depth to saturated zone	1.00	Very limited Ponding	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	0.69	Too sandy	0.69	Too sandy	0.69

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
34: Lakeland-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
35: Lakeland-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 1.00
36: Lakeland-----	85	Very limited Too sandy Slope	1.00 0.63	Very limited Too sandy Slope	1.00 0.63	Very limited Slope Too sandy	1.00 1.00
37: Lakeland-----	45	Very limited Slope Too sandy	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
Foxworth-----	40	Very limited Slope Too sandy	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
38: Leefield-----	85	Somewhat limited Too sandy Depth to saturated zone Slow water movement	0.91 0.39 0.26	Somewhat limited Too sandy Slow water movement Depth to saturated zone	0.91 0.26 0.19	Somewhat limited Too sandy Depth to saturated zone Slow water movement Slope	0.91 0.39 0.26 0.12
39: Leon-----	70	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Leon, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
42: Lucy-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
44: Lynchburg-----	80	Very limited Depth to saturated zone Too sandy	1.00 0.82	Very limited Depth to saturated zone Too sandy	0.99 0.82	Very limited Depth to saturated zone Too sandy	1.00 0.82
45: Lynn Haven-----	85	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
46: Hurricane-----	35	Very limited Too sandy Depth to saturated zone	1.00 0.39	Very limited Too sandy Depth to saturated zone	1.00 0.19	Very limited Too sandy Depth to saturated zone	1.00 0.39
Leon-----	30	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Albany-----	25	Very limited Too sandy Depth to saturated zone	1.00 0.81	Very limited Too sandy Depth to saturated zone	1.00 0.48	Very limited Too sandy Depth to saturated zone Slope	1.00 0.81 0.12
47: Lynn Haven-----	35	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 1.00
Torhunta-----	30	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.03	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.03	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.03
Croatan-----	25	Very limited Depth to saturated zone Flooding Ponding Organic matter content Too acid	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Too acid Flooding	1.00 1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Flooding Ponding Too acid	1.00 1.00 1.00 1.00
48: Meadowbrook-----	60	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
Meadowbrook, hydric-	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
49: Meadowbrook, slough-	85	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 1.00
54: Pelham-----	65	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
54: Pelham, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69
55: Plummer-----	60	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99
Plummer, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99
56: Pottsburg-----	60	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Pottsburg, hydric---	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
57: Surrency, depressional-----	35	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.92	Very limited Ponding Depth to saturated zone Too sandy	1.00 1.00 0.92	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.92
Pantego, depressional-----	30	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.01	Very limited Ponding Depth to saturated zone Too sandy	1.00 1.00 0.01	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.01
Croatan, depressional-----	25	Very limited Depth to saturated zone Ponding Organic matter content Too acid	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Too acid	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Too acid	1.00 1.00 1.00 1.00
58: Rutlege-----	35	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
58: Bibb-----	30	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.01
Surrency-----	25	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.92	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.92 0.40	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.92
59: Hosford-----	80	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 0.88
60: Sapelo-----	65	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Sapelo, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
61: Osier-----	80	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
62: Scranton, slough----	90	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.81	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.81 0.40	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.81
63: Stilson-----	85	Somewhat limited Too sandy	0.99	Somewhat limited Too sandy	0.99	Somewhat limited Too sandy	0.99
65: Pickney-----	40	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 1.00
Bibb-----	25	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.01

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
65: Dorovan-----	25	Very limited Depth to saturated zone Flooding Organic matter content	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00
66: Wahee-----	45	Very limited Flooding Slow water movement Depth to saturated zone	1.00 0.94 0.39	Somewhat limited Slow water movement Flooding Depth to saturated zone	0.94 0.40 0.19	Very limited Flooding Slow water movement Depth to saturated zone	1.00 0.94 0.39
Ochlockonee-----	35	Very limited Flooding Too sandy	1.00 0.57	Somewhat limited Too sandy Flooding	0.57 0.40	Very limited Flooding Too sandy	1.00 0.57
67: Goldhead-----	85	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
68: Goldhead, depressional-----	45	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00
Meadowbrook, depressional-----	40	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00
69: Troup-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
70: Troup-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 1.00
71: Pits-----	98	Not rated		Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope Too sandy	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
73:							
Foxworth-----	45	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
Hosford-----	25	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 0.01	Very limited Too sandy Depth to saturated zone Slope	1.00 1.00 0.01	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 1.00
Lucy-----	20	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
74:							
Garcon-----	40	Very limited Flooding Too sandy Depth to saturated zone	1.00 1.00 0.07	Very limited Too sandy Depth to saturated zone	1.00 0.03	Very limited Too sandy Flooding Depth to saturated zone	1.00 0.60 0.07
Ochlockonee-----	25	Very limited Flooding Too sandy	1.00 0.57	Somewhat limited Too sandy	0.57	Somewhat limited Flooding Too sandy	0.60 0.57
Ousley-----	25	Very limited Flooding Too sandy Depth to saturated zone	1.00 1.00 0.07	Very limited Too sandy Depth to saturated zone	1.00 0.03	Very limited Too sandy Flooding Depth to saturated zone	1.00 0.60 0.07
75:							
Brantley-----	35	Very limited Slope Slow water movement Too sandy	1.00 0.96 0.07	Very limited Slope Slow water movement Too sandy	1.00 0.96 0.07	Very limited Slope Slow water movement Too sandy	1.00 0.96 0.07
Okeelala-----	30	Very limited Slope Too sandy	1.00 0.01	Very limited Slope Too sandy	1.00 0.01	Very limited Slope Too sandy	1.00 0.01
Lucy-----	25	Very limited Too sandy Slope	1.00 0.63	Very limited Too sandy Slope	1.00 0.63	Very limited Slope Too sandy	1.00 1.00
78:							
Lucy-----	35	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
Blanton-----	30	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Too sandy	1.00 1.00
Cowarts-----	25	Very limited Slope Too sandy	1.00 0.68	Very limited Slope Too sandy	1.00 0.68	Very limited Slope Too sandy Gravel content	1.00 0.68 0.08

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
81: Scranton-----	85	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
82: Brickyard-----	55	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00
Chowan-----	35	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.26	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.40 0.26	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.26
83: Plummer, hydric----	40	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99
Sapelo-----	30	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Pottsburg-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
91: Woodington-----	85	Very limited Depth to saturated zone Too sandy	1.00 0.87	Very limited Depth to saturated zone Too sandy	1.00 0.87	Very limited Depth to saturated zone Too sandy	1.00 0.87
92: Pamlico, frequently flooded-----	50	Very limited Depth to saturated zone Flooding Ponding Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Flooding Ponding	1.00 1.00 1.00 1.00
Pickney, frequently flooded-----	45	Very limited Depth to saturated zone Flooding Ponding Too sandy	1.00 1.00 1.00 1.00	Very limited Too sandy Ponding Depth to saturated zone Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding Ponding	1.00 1.00 1.00 1.00

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
95: Bibb-----	35	Very limited Depth to saturated zone Flooding Too sandy	1.00 1.00 0.01	Very limited Depth to saturated zone Too sandy	1.00 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.60 0.01
Rains-----	30	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
Garcon-----	20	Very limited Flooding Too sandy Depth to saturated zone	1.00 1.00 0.07	Very limited Too sandy Depth to saturated zone	1.00 0.03	Very limited Too sandy Flooding Depth to saturated zone	1.00 0.60 0.07
96: Foxworth-----	50	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy	1.00
Lakeland-----	35	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12
97: Foxworth-----	50	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 1.00
Lakeland-----	35	Very limited Too sandy Slope	1.00 0.63	Very limited Too sandy Slope	1.00 0.63	Very limited Slope Too sandy	1.00 1.00
98: Leon-----	35	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 1.00
Chipley-----	30	Very limited Too sandy Depth to saturated zone	1.00 0.39	Very limited Too sandy Depth to saturated zone	1.00 0.19	Very limited Too sandy Depth to saturated zone	1.00 0.39
Leon, hydric-----	15	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
99: Water-----	100	Not rated		Not rated		Not rated	

Soil Survey of Liberty County, Florida

Table 9a.--Recreation (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
101: Albany-----	55	Very limited Too sandy Depth to saturated zone	1.00 0.81	Very limited Too sandy Depth to saturated zone	1.00 0.48	Very limited Too sandy Depth to saturated zone	1.00 0.81
Blanton-----	30	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Too sandy Slope	1.00 0.12

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
4: Alpin-----	45	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy Slope	0.83 0.50 0.04
Foxworth-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
5: Rains-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Bladen-----	45	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
6: Blanton-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy	0.99 0.50
7: Blanton-----	80	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy	0.99 0.50
8: Brickyard-----	75	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Flooding Depth to saturated zone	1.00 1.00
9: Centenary-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy	1.00 0.50
11: Chipley-----	50	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
11: Foxworth-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
12: Rutlege-----	45	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.96
Plummer-----	40	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99	Very limited Ponding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.92 0.50
13: Dorovan-----	50	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	1.00 1.00 1.00
Pamlico-----	45	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	1.00 1.00 1.00
14: Dothan-----	84	Somewhat limited Too sandy	0.65	Somewhat limited Too sandy	0.65	Not limited	
15: Dothan-----	85	Somewhat limited Too sandy	0.65	Somewhat limited Too sandy	0.65	Not limited	
17: Dothan-----	40	Somewhat limited Too sandy	0.65	Somewhat limited Too sandy	0.65	Somewhat limited Slope	0.16
Fuquay-----	35	Somewhat limited Too sandy	0.93	Somewhat limited Too sandy	0.93	Somewhat limited Slope Droughty	0.04 0.03
24: Goldsboro-----	90	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy	0.94	Not limited	
25: Goldsboro-----	90	Somewhat limited Too sandy	0.94	Somewhat limited Too sandy	0.94	Not limited	

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
26: Foxworth-----	80	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
27: Fuquay-----	85	Somewhat limited Too sandy	0.93	Somewhat limited Too sandy	0.93	Somewhat limited Droughty	0.03
30: Elloree-----	35	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.90 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.90 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.27
Bibb-----	30	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Flooding Depth to saturated zone	1.00 1.00
Meggett-----	25	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.08	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.08	Very limited Flooding Depth to saturated zone	1.00 1.00
31: Hurricane-----	45	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy Depth to saturated zone	0.99 0.50 0.19
Chipley-----	35	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19
32: Plummer-----	45	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.99	Very limited Ponding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.92 0.50
Pelham-----	40	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.69	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.69	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.82
34: Lakeland-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy	0.99 0.50

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
35: Lakeland-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy	0.99 0.50
36: Lakeland-----	90	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Slope Too sandy	0.99 0.63 0.50
37: Lakeland-----	50	Very limited Too sandy Slope	1.00 0.82	Very limited Too sandy	1.00	Very limited Slope Droughty Too sandy	1.00 0.99 0.50
Foxworth-----	40	Very limited Too sandy Slope	1.00 0.18	Very limited Too sandy	1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.34
38: Leefield-----	85	Somewhat limited Too sandy	0.91	Somewhat limited Too sandy	0.91	Somewhat limited Droughty Depth to saturated zone	0.20 0.19
39: Leon, nonhydric----	70	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	0.99 0.50
Leon, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
42: Lucy-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.09
44: Lynchburg-----	80	Somewhat limited Depth to saturated zone Too sandy	0.99 0.82	Somewhat limited Depth to saturated zone Too sandy	0.99 0.82	Very limited Depth to saturated zone	0.99
45: Lynn Haven-----	90	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.01

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
46: Hurricane-----	35	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy Depth to saturated zone	0.99 0.50 0.19
Leon-----	30	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	0.99 0.50
Albany-----	25	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
47: Torhunta-----	35	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.03	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.03	Very limited Flooding Depth to saturated zone	1.00 1.00
Lynn Haven-----	30	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Too sandy Droughty	1.00 1.00 0.50 0.01
Croatan-----	25	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 1.00 0.40	Very limited Ponding Flooding Organic matter content Depth to saturated zone Too acid	1.00 1.00 1.00 1.00 1.00
48: Meadowbrook, nonhydic-----	75	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.87 0.50
Meadowbrook, hydric-	15	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.87 0.50

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
49: Meadowbrook, slough-	85	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.87 0.50
54: Pelham, nonhydic---	65	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Droughty	1.00 0.82
Pelham, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Too sandy	1.00 0.69	Very limited Depth to saturated zone Droughty	1.00 0.82
55: Plummer, nonhydic--	60	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
Plummer, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
56: Pottsburg, nonhydic-----	60	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy Droughty	0.99 0.50 0.48
Pottsburg, hydric---	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.48
57: Surrency, depressional-----	35	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.92	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.92	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.34
Pantego, depressional-----	30	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.01	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 0.01	Very limited Ponding Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
57: Croatan, depressional-----	25	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone Too acid	1.00 1.00 1.00 1.00
58: Rutlege-----	35	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.96
Bibb-----	30	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Flooding Depth to saturated zone	1.00 1.00
Surrency-----	25	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.92 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.92 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.34
59: Hosford-----	80	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.34
60: Sapelo, nonhydric---	65	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.92 0.50
Sapelo, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
61: Osier-----	80	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.77 0.50

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
62: Scranton, slough----	90	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.81 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 0.81 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.64
63: Stilson-----	85	Somewhat limited Too sandy	0.99	Somewhat limited Too sandy	0.99	Somewhat limited Droughty	0.19
65: Pickney-----	40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.87
Bibb-----	25	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Depth to saturated zone Flooding Too sandy	1.00 0.40 0.01	Very limited Flooding Depth to saturated zone	1.00 1.00
Dorovan-----	25	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00 0.40	Very limited Flooding Organic matter content Depth to saturated zone	1.00 1.00 1.00
66: Wahee-----	45	Not limited		Not limited		Somewhat limited Flooding Depth to saturated zone	0.60 0.19
Ochlockonee-----	35	Somewhat limited Too sandy	0.57	Somewhat limited Too sandy	0.57	Somewhat limited Flooding	0.60
67: Goldhead-----	85	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.69 0.50
68: Goldhead, depressional-----	60	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty Too sandy	1.00 1.00 0.69 0.50

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
68: Meadowbrook, depressional-----	40	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty Too sandy	1.00 1.00 0.87 0.50
69: Troup-----	85	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
70: Troup-----	80	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
71: Pits-----	100	Not rated		Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope Too sandy	1.00 1.00	Very limited Too sandy Slope	1.00 1.00	Very limited Slope Droughty Too sandy	1.00 0.99 0.50
73: Foxworth-----	45	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.34
Hosford-----	25	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty Slope	1.00 0.50 0.34 0.01
Lucy-----	20	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.09
74: Garcon-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Flooding Depth to saturated zone	0.60 0.03
Ochlockonee-----	25	Somewhat limited Too sandy	0.57	Somewhat limited Too sandy	0.57	Somewhat limited Flooding	0.60
Ousley-----	25	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Flooding Too sandy Depth to saturated zone	1.00 0.60 0.50 0.03

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
75: Brantley-----	40	Very limited Slope Too sandy	1.00 0.07	Somewhat limited Too sandy	0.07	Very limited Slope	1.00
Okeelala-----	35	Very limited Slope Too sandy	1.00 0.01	Somewhat limited Too sandy	0.01	Very limited Slope	1.00
Lucy-----	25	Very limited Too sandy Slope	1.00 0.08	Very limited Too sandy	1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.09
78: Lucy-----	45	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 0.02	Very limited Slope Too sandy Droughty	1.00 0.50 0.09
Blanton-----	30	Very limited Too sandy Slope	1.00 1.00	Very limited Too sandy Slope	1.00 0.02	Very limited Slope Droughty Too sandy	1.00 0.99 0.50
Cowarts-----	25	Somewhat limited Too sandy Slope	0.27 0.08	Somewhat limited Too sandy	0.27	Very limited Slope	1.00
81: Scranton-----	85	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Droughty	0.99 0.71
82: Brickyard-----	55	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Flooding Depth to saturated zone	1.00 1.00
Chowan-----	35	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Flooding Depth to saturated zone	1.00 1.00
83: Plummer-----	35	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Too sandy	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
Sapelo-----	30	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.92 0.50

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
83: Pottsburg-----	25	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy Droughty	0.99 0.50 0.48
91: Woodington-----	90	Very limited Depth to saturated zone Too sandy	1.00 0.87	Very limited Depth to saturated zone Too sandy	1.00 0.87	Very limited Depth to saturated zone	1.00
92: Pamlico, frequently flooded-----	50	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Ponding Flooding Organic matter content Depth to saturated zone	1.00 1.00 1.00 1.00
Pickney, frequently flooded-----	35	Very limited Depth to saturated zone Too sandy Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Ponding Flooding Depth to saturated zone Droughty	1.00 1.00 1.00 0.87
95: Bibb-----	40	Very limited Depth to saturated zone Too sandy	1.00 0.01	Very limited Depth to saturated zone Too sandy	1.00 0.01	Very limited Depth to saturated zone Flooding	1.00 0.60
Rains-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
Garcon-----	25	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Flooding Depth to saturated zone	0.60 0.03
96: Foxworth-----	50	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
Lakeland-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy	0.99 0.50
97: Foxworth-----	45	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Too sandy Droughty	0.50 0.34

Soil Survey of Liberty County, Florida

Table 9b.--Recreation (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
97: Lakeland-----	40	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Slope Too sandy	0.99 0.63 0.50
98: Leon, nonhydric-----	45	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Too sandy Depth to saturated zone	1.00 0.99	Very limited Depth to saturated zone Too sandy	0.99 0.50
Chipley-----	30	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19
Leon, hydric-----	5	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
99: Water-----	100	Not rated		Not rated		Not rated	
101: Albany-----	55	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Too sandy Depth to saturated zone	1.00 0.11	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
Blanton-----	30	Very limited Too sandy	1.00	Very limited Too sandy	1.00	Very limited Droughty Too sandy	0.99 0.50

Soil Survey of Liberty County, Florida

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 as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
2: Albany-----	Fair	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Poor
4: Alpin-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
5: Rains-----	Fair	Fair	Fair	Good	Good	Good	Good	Fair	Good	Good
Bladen-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
6: Blanton-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
7: Blanton-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
8: Brickyard-----	Poor	Poor	Fair	Good	Fair	Good	Fair	Poor	Good	Good
9: Centenary-----	Poor	Fair	Fair	Poor	Fair	Very poor	Very poor	Fair	Fair	Very poor
11: Chipley-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
12: Rutlege-----	Very poor	Poor	Poor	Poor	Poor	Fair	Good	Poor	Poor	Good
Plummer-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
13: Dorovan-----	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Pamlico-----	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
14: Dothan-----	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
15: Dothan-----	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
17: Dothan-----	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Fuquay-----	Fair	Fair	Good	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor
24: Goldsboro-----	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
25: Goldsboro-----	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
26: Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
27: Fuquay-----	Fair	Fair	Good	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor
30: Elloree-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Bibb-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Meggett-----	Poor	Fair	Fair	Fair	Good	Good	Good	Fair	Good	Good
31: Hurricane-----	Poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Chipley-----	Poor	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
32: Plummer-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Pelham-----	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
34: Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
35: Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
36: Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
37: Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
38: Leefield-----	Fair	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Very poor
39: Leon, nonhydic----	Poor	Fair	Good	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Leon, hydric-----	Poor	Fair	Good	Poor	Fair	Fair	Poor	Fair	Fair	Poor
42: Lucy-----	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
44: Lynchburg-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
45: Lynn Haven-----	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Fair	Poor	Poor
46: Hurricane-----	Poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Leon-----	Poor	Fair	Good	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Albany-----	Fair	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
47: Torhunta-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Lynn Haven-----	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Fair	Poor	Poor
Croatan-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
48: Meadowbrook, nonhydic-----	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Meadowbrook, hydric-----	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
49: Meadowbrook, slough-----	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
54: Pelham, nonhydic--	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Pelham, hydric----	Poor	Poor	Fair	Fair	Fair	Fair	Fair	Poor	Fair	Fair

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
55: Plummer, nonhydric-	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Plummer, hydric----	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
56: Pottsburg, nonhydric-----	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Pottsburg, hydric--	Poor	Fair	Fair	Poor	Fair	Poor	Fair	Poor	Fair	Fair
57: Surrency-----	Poor	Poor	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair
Pantego-----	Very poor	Very poor	Very poor	Fair	Poor	Good	Good	Very poor	Poor	Good
Croatan-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
58: Rutlege-----	Very poor	Poor	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair
Bibb-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Surrency-----	Poor	Poor	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair
59: Hosford-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Fair
60: Sapelo, nonhydric--	Poor	Fair	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Sapelo, hydric.										
61: Osier-----	Very poor	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Fair	Poor
62: Scranton-----	Fair	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
63: Stilson-----	Fair	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
65: Pickney-----	Very poor	Poor	Fair	Poor	Poor	Good	Very poor	Poor	Poor	Good
Bibb-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Dorovan-----	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
66: Wahee-----	Fair	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair
Ochlockonee-----	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
67: Goldhead-----	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
68: Goldhead-----	Very poor	Very poor	Very poor	Very poor	Very poor	Fair	Good	Very poor	Very poor	Good
Meadowbrook-----	Very poor	Very poor	Very poor	Very poor	Very poor	Fair	Good	Very poor	Very poor	Good
69: Troup-----	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
70: Troup-----	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
71: Pits-----	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
72: Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
73: Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Hosford-----	Very poor	Very poor	Very poor	Poor	Poor	Good	Good	Poor	Poor	Fair
Lucy-----	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
74: Garcon-----	Poor	Fair	Good	Poor	Fair	Poor	Very poor	Fair	Fair	Poor
Ochlockonee-----	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Ousley-----	Poor	Fair	Good	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
75: Brantley-----	Poor	Fair	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor
Okeelala-----	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Lucy-----	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
78: Lucy-----	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
78: Blanton-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Cowarts-----	Poor	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
81: Scranton-----	Fair	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
82: Brickyard-----	Poor	Poor	Fair	Good	Fair	Good	Fair	Poor	Good	Fair
Chowan-----	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
83: Plummer-----	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
Sapelo-----	Poor	Fair	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Pottsburg-----	Poor	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Poor	Poor
91: Woodington-----	Poor	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Poor
92: Pamlico-----	Very poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Pickney-----	Very poor	Poor	Fair	Poor	Poor	Good	Very poor	Poor	Poor	Good
95: Bibb-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Rains-----	Fair	Fair	Poor	Fair	Fair	Good	Fair	Fair	Fair	Fair
Garcon-----	Poor	Fair	Good	Poor	Fair	Poor	Poor	Fair	Fair	Poor
96: Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
97: Foxworth-----	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Lakeland-----	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
98: Leon, nonhydric----	Poor	Fair	Good	Poor	Fair	Poor	Poor	Fair	Fair	Poor
Chipley-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
Leon, hydric-----	Poor	Fair	Good	Poor	Fair	Fair	Poor	Fair	Fair	Poor

Soil Survey of Liberty County, Florida

Table 10.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Forestland wildlife	Wetland wildlife
99: Water.										
101: Albany-----	Fair	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
Blanton-----	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor

Soil Survey of Liberty County, Florida

Table 11.--Hydric Soils

[Only those map unit components that are rated as hydric are listed. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
5: Rains and Bladen soils-----	Rains	50	Drainageways, flats, fluviomarine terraces	Yes	2B3
	Bladen	45	Drainageways, flats, fluviomarine terraces	Yes	2B3
8: Brickyard clay loam, frequently flooded-----	Brickyard	75	Flood plains, marine terraces	Yes	2B3, 4
	Chowan	2	Flood plains, marine terraces	Yes	2B3, 4
12: Rutlege and Plummer soils, depressional-----	Rutlege	45	Depressions, marine terraces	Yes	2B1, 3
	Plummer	40	Depressions, marine terraces	Yes	2B1, 3
	Bibb	15	Flood plains, marine terraces	Yes	2B3
13: Dorovan-Pamlico complex, depressional-----	Dorovan	50	Depressions, marine terraces	Yes	1, 3
	Pamlico	45	Depressions, marine terraces	Yes	1, 3
	Lynn Haven	5	Flats, marine terraces	Yes	2B1
30: Elloree, Bibb, and Meggett soils, 0 to 3 percent slopes, frequently flooded-----	Elloree	35	Flood plains, marine terraces	Yes	2B2, 4
	Bibb	30	Flood plains, marine terraces	Yes	2B3, 4
	Meggett	25	Flood plains, marine terraces	Yes	2B3, 4
	Rutlege	10	Flood plains, marine terraces	Yes	2B1, 4

Soil Survey of Liberty County, Florida

Table 11.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
32: Plummer and Pelham soils-----	Plummer	45	Flats, marine terraces, open depressions	Yes	2B1, 3
	Pelham	40	Flats, marine terraces, open depressions	Yes	2B2, 3
	Pottsburg, hydric	5	Flats, marine terraces	Yes	2B1
	Sapelo, hydric	5	Flats, marine terraces	Yes	2B1
39: Leon sand-----	Leon, hydric	20	Flats, marine terraces	Yes	2B1
	Osier	5	Flats, marine terraces	Yes	2B1
44: Lynchburg loamy sand-----	Rains	10	Flood plains, marine terraces	Yes	2B3
45: Lynn Haven sand-----	Lynn Haven	90	Flats, marine terraces	Yes	2B1
	Leon, hydric	5	Flats, marine terraces	Yes	2B1
	Pickney, frequently flooded	3	Flood plains, marine terraces	Yes	2B1, 3, 4
	Pamlico, frequently flooded	2	Flood plains, marine terraces	Yes	1, 3, 4
47: Torhunta-Lynn Haven-Croatan complex, frequently flooded----	Torhunta	35	Flood plains, marine terraces	Yes	2B3, 4
	Lynn Haven	30	Flood plains, marine terraces	Yes	2B1, 4
	Croatan	25	Flood plains, marine terraces	Yes	1, 3, 4
48: Meadowbrook sand-----	Meadowbrook, hydric	15	Flats, marine terraces	Yes	2B1
	Goldhead, depressional	8	Depressions, marine terraces	Yes	2B1, 3
	Pantego, depressional	2	Depressions, marine terraces	Yes	2B3, 3

Soil Survey of Liberty County, Florida

Table 11.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
49: Meadowbrook sand, slough-----	Meadowbrook, slough	85	Drainageways, marine terraces	Yes	2B1
	Rutlege	8	Depressions, marine terraces	Yes	2B1, 3
	Surrency, depressional	7	Depressions, marine terraces	Yes	2B2, 3
54: Pelham loamy sand-----	Pelham, hydric	20	Flats, marine terraces	Yes	2B2
55: Plummer sand, 0 to 5 percent slopes-----	Plummer, hydric	20	Flats, marine terraces	Yes	2B1
56: Pottsburg sand-----	Pottsburg, hydric	20	Flats, marine terraces	Yes	2B1
57: Surrency, Pantego, and Croatan soils, depressional-----	Surrency, depressional	35	Depressions, marine terraces	Yes	2B2, 3
	Pantego, depressional	30	Depressions, marine terraces	Yes	2B3, 3
	Croatan, depressional	25	Depressions, marine terraces	Yes	1, 3
	Osier	10	Flats, marine terraces	Yes	2B1
58: Rutlege, Bibb, and Surrency soils, frequently flooded-----	Rutlege	35	Flood plains, marine terraces	Yes	2B1, 4
	Bibb	30	Flood plains, marine terraces	Yes	2B3, 4
	Surrency	25	Flood plains, marine terraces	Yes	2B2, 4
59: Hosford mucky coarse sand, 2 to 8 percent slopes-----	Hosford	80	Hillslopes, marine terraces	Yes	2B1
60: Sapelo sand-----	Sapelo, hydric	20	Flats, marine terraces	Yes	2B1
	Rutlege	5	Depressions, marine terraces	Yes	2B1, 3

Soil Survey of Liberty County, Florida

Table 11.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
61: Osier sand-----	Osier	80	Flats, marine terraces	Yes	2B1
	Hosford	10	Hillslopes, marine terraces	Yes	2B1
	Rutlege	10	Depressions, marine terraces	Yes	2B1, 3
62: Scranton loamy sand, slough----	Scranton	90	Drainageways, marine terraces	Yes	2B2
	Rutlege	10	Depressions, marine terraces	Yes	2B1, 3
65: Pickney, Dorovan, and Bibb soils, frequently flooded-----	Pickney	40	Flood plains, marine terraces	Yes	2B1, 4
	Bibb	25	Flood plains, marine terraces	Yes	2B3, 4
	Dorovan	25	Flood plains, marine terraces	Yes	1, 4
66: Wahee and Ochlockonee soils, 0 to 3 percent slopes, occasionally flooded-----	Brickyard	10	Flood plains, marine terraces	Yes	2B3, 4
	Chowan	10	Flood plains, marine terraces	Yes	2B3, 4
67: Goldhead sand-----	Surrency, depressional	10	Depressions, marine terraces	Yes	2B2, 3
	Pantego, depressional	5	Depressions, marine terraces	Yes	2B3, 3
68: Goldhead-Meadowbrook complex, depressional-----	Goldhead, depressional	45	Depressions, marine terraces	Yes	2B1, 3
	Meadowbrook, depressional	40	Depressions, marine terraces	Yes	2B1, 3
73: Foxworth-Hosford-Lucy complex, 8 to 25 percent slopes-----	Hosford	25	Hillslopes, marine terraces	Yes	2B1

Soil Survey of Liberty County, Florida

Table 11.--Hydric Soils--Continued

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
74: Garcon, Ochlockonee, and Ousley soils, occasionally flooded----	Brickyard	5	Flood plains, marine terraces	Yes	2B3, 4
	Chowan	5	Flood plains, marine terraces	Yes	2B3, 4
81: Scranton fine sand-----	Rutlege	10	Depressions, marine terraces	Yes	2B1, 3
82: Brickyard and Chowan soils, frequently flooded-----	Brickyard	55	Flood plains, marine terraces	Yes	2B3, 4
	Chowan	35	Flood plains, marine terraces	Yes	2B3, 4
83: Plummer, Sapelo, and Pottsburg soils-----	Plummer	35	Flats, marine terraces	Yes	2B1
91: Woodington loamy sand-----	Woodington	90	Flats, marine terraces	Yes	2B3
92: Pamlico-Pickney complex, frequently flooded-----	Pamlico, frequently flooded	50	Flood plains, marine terraces	Yes	1, 3, 4
	Pickney, frequently flooded	35	Flood plains, marine terraces	Yes	2B1, 3, 4
	Dorovan	8	Flood plains, marine terraces	Yes	1, 4
	Rutlege	7	Flood plains, marine terraces	Yes	2B1, 4
95: Bibb, Rains, and Garcon Soils, occasionally flooded-----	Bibb	40	Flood plains, marine terraces	Yes	2B3
	Rains	25	Flood plains, marine terraces	Yes	2B3
98: Leon-Chipley complex-----	Leon, hydric	5	Knolls, marine terraces	Yes	2B1

Soil Survey of Liberty County, Florida

Explanation of hydric criteria codes:

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.

Soil Survey of Liberty County, Florida

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 limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.81
4: Alpin-----	45	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
Foxworth-----	40	Not limited		Somewhat limited Depth to saturated zone	0.61	Somewhat limited Slope	0.88
5: Rains-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Bladen-----	45	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50
6: Blanton-----	85	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
7: Blanton-----	80	Not limited		Somewhat limited Depth to saturated zone	0.61	Somewhat limited Slope	0.88
8: Brickyard-----	75	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
9: Centenary-----	85	Not limited		Somewhat limited Depth to saturated zone	0.47	Not limited	
11: Chipley-----	50	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Foxworth-----	40	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	

Soil Survey of Liberty County, Florida

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
12: Rutlege-----	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Plummer-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
13: Dorovan-----	50	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Pamlico-----	45	Very limited Ponding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Subsidence	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00
14: Dothan-----	84	Not limited		Somewhat limited Depth to saturated zone	0.82	Not limited	
15: Dothan-----	85	Not limited		Somewhat limited Depth to saturated zone	0.82	Not limited	
17: Dothan-----	40	Somewhat limited Slope	0.16	Somewhat limited Depth to saturated zone Slope	0.82 0.16	Very limited Slope	1.00
Fuquay-----	35	Somewhat limited Slope	0.04	Somewhat limited Depth to saturated zone Slope	0.61 0.04	Very limited Slope	1.00
24: Goldsboro-----	90	Not limited		Very limited Depth to saturated zone	0.99	Not limited	
25: Goldsboro-----	90	Not limited		Very limited Depth to saturated zone	0.99	Not limited	

Soil Survey of Liberty County, Florida

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
26: Foxworth-----	80	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
27: Fuquay-----	85	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
30: Elloree-----	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Bibb-----	30	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Meggett-----	25	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
31: Hurricane-----	45	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Chipley-----	35	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
32: Plummer-----	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Pelham-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
34: Lakeland-----	85	Not limited		Not limited		Not limited	
35: Lakeland-----	85	Not limited		Not limited		Somewhat limited Slope	0.88
36: Lakeland-----	90	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Liberty County, Florida

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
37: Lakeland-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Foxworth-----	40	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.61	Very limited Slope	1.00
38: Leefield-----	85	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
39: Leon, nonhydic----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Leon, hydic-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
42: Lucy-----	85	Not limited		Not limited		Not limited	
44: Lynchburg-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
45: Lynn Haven-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
46: Hurricane-----	35	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Leon-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Albany-----	25	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.81
47: Torhunta-----	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Lynn Haven-----	30	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

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
47: Croatan-----	25	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00
48: Meadowbrook, nonhydic-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Meadowbrook, hydric-	15	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
49: Meadowbrook, slough-	85	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
54: Pelham, nonhydic---	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Pelham, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
55: Plummer, nonhydic--	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Plummer, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
56: Pottsburg, nonhydic-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Pottsburg, hydric---	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
57: Surrency, depressional-----	35	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

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
57: Pantego, depressional-----	30	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Croatan, depressional-----	25	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
58: Rutlege-----	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Bibb-----	30	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Surrency-----	25	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
59: Hosford-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.12
60: Sapelo, nonhydric---	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Sapelo, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
61: Osier-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
62: Scranton, slough----	90	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

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
63: Stilson-----	85	Not limited		Somewhat limited Depth to saturated zone	0.99	Not limited	
65: Pickney-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Bibb-----	25	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Dorovan-----	25	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
66: Wahee-----	45	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.39	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.39
Ochlockonee-----	35	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00
67: Goldhead-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
68: Goldhead, depressional-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Meadowbrook, depressional-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
69: Troup-----	85	Not limited		Not limited		Not limited	
70: Troup-----	80	Not limited		Not limited		Somewhat limited Slope	0.88

Soil Survey of Liberty County, Florida

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
71: Pits-----	98	Not rated		Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
73: Foxworth-----	45	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.61	Very limited Slope	1.00
Hosford-----	25	Very limited Depth to saturated zone Slope	1.00 0.01	Very limited Depth to saturated zone Slope	1.00 0.01	Very limited Depth to saturated zone Slope	1.00 1.00
Lucy-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
74: Garcon-----	40	Very limited Flooding Depth to saturated zone	1.00 0.07	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.07
Ochlockonee-----	25	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00
Ousley-----	25	Very limited Flooding Depth to saturated zone	1.00 0.07	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.07
75: Brantley-----	35	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope	1.00	Very limited Slope Shrink-swell	1.00 0.50
Okeelala-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Lucy-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
78: Lucy-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Blanton-----	30	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.61	Very limited Slope	1.00
Cowarts-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Liberty County, Florida

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
81: Scranton-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
82: Brickyard-----	55	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
Chowan-----	35	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
83: Plummer-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Sapelo-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Pottsburg-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
91: Woodington-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
92: Pamlico, frequently flooded-----	50	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00
Pickney, frequently flooded-----	35	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00
95: Bibb-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

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
95: Rains-----	25	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Garcon-----	25	Very limited Flooding Depth to saturated zone	1.00 0.07	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.07
96: Foxworth-----	50	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
Lakeland-----	40	Not limited		Not limited		Not limited	
97: Foxworth-----	45	Not limited		Somewhat limited Depth to saturated zone	0.61	Somewhat limited Slope	0.88
Lakeland-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
98: Leon, nonhydic-----	45	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Chipley-----	30	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Leon, hydric-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
99: Water-----	100	Not rated		Not rated		Not rated	
101: Albany-----	55	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.81
Blanton-----	30	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	

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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 limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Somewhat limited Depth to saturated zone	0.48	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
4: Alpin-----	45	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Somewhat limited Droughty Too sandy Slope	0.83 0.50 0.04
Foxworth-----	40	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Too sandy Droughty	0.50 0.34
5: Rains-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Very limited Depth to saturated zone	1.00
Bladen-----	45	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Too clayey Cutbanks cave	1.00 0.72 0.10	Very limited Depth to saturated zone	1.00
6: Blanton-----	85	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Very limited Droughty Too sandy	0.99 0.50
7: Blanton-----	80	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Very limited Droughty Too sandy	0.99 0.50
8: Brickyard-----	75	Very limited Depth to saturated zone Flooding Shrink-swell	1.00 1.00 0.50	Very limited Depth to saturated zone Flooding Too clayey Cutbanks cave	1.00 0.80 0.28 0.10	Very limited Flooding Depth to saturated zone	1.00 1.00
9: Centenary-----	85	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.47	Very limited Droughty Too sandy	1.00 0.50

Soil Survey of Liberty County, Florida

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
11: Chipley-----	50	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19
Foxworth-----	40	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Too sandy Droughty	0.50 0.34
12: Rutlege-----	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.96
Plummer-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.92 0.50
13: Dorovan-----	50	Very limited Ponding Depth to saturated zone Subsidence	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	1.00 1.00 1.00
Pamlico-----	45	Very limited Ponding Depth to saturated zone Subsidence	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	1.00 1.00 1.00
14: Dothan-----	84	Not limited		Somewhat limited Depth to saturated zone Cutbanks cave	0.82 0.10	Not limited	
15: Dothan-----	85	Not limited		Somewhat limited Depth to saturated zone Cutbanks cave	0.82 0.10	Not limited	
17: Dothan-----	40	Somewhat limited Slope	0.16	Somewhat limited Depth to saturated zone Slope Cutbanks cave	0.82 0.16 0.10	Somewhat limited Slope	0.16

Soil Survey of Liberty County, Florida

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
17: Fuquay-----	35	Somewhat limited Slope	0.04	Very limited Cutbanks cave Depth to saturated zone Slope	1.00 0.61 0.04	Somewhat limited Slope Droughty	0.04 0.03
24: Goldsboro-----	90	Not limited		Very limited Depth to saturated zone Cutbanks cave	0.99 0.10	Not limited	
25: Goldsboro-----	90	Not limited		Very limited Depth to saturated zone Cutbanks cave	0.99 0.10	Not limited	
26: Foxworth-----	80	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Too sandy Droughty	0.50 0.34
27: Fuquay-----	85	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Droughty	0.03
30: Elloree-----	35	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.27
Bibb-----	30	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone	1.00 1.00
Meggett-----	25	Very limited Depth to saturated zone Flooding Shrink-swell	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too clayey Cutbanks cave	1.00 1.00 0.80 0.28 0.10	Very limited Flooding Depth to saturated zone	1.00 1.00
31: Hurricane-----	45	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Droughty Too sandy Depth to saturated zone	0.99 0.50 0.19

Soil Survey of Liberty County, Florida

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
31: Chipley-----	35	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19
32: Plummer-----	45	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.92 0.50
Pelham-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.82
34: Lakeland-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Too sandy	0.99 0.50
35: Lakeland-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Too sandy	0.99 0.50
36: Lakeland-----	90	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63	Somewhat limited Droughty Slope Too sandy	0.99 0.63 0.50
37: Lakeland-----	50	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00	Very limited Slope Droughty Too sandy	1.00 0.99 0.50
Foxworth-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave Depth to saturated zone	1.00 1.00 0.61	Very limited Slope Too sandy Droughty	1.00 0.50 0.34
38: Leefield-----	85	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Droughty Depth to saturated zone	0.20 0.19
39: Leon, nonhydric----	70	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy	0.99 0.50

Soil Survey of Liberty County, Florida

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
39: Leon, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
42: Lucy-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Too sandy Droughty	0.50 0.09
44: Lynchburg-----	80	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Very limited Depth to saturated zone	0.99
45: Lynn Haven-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.01
46: Hurricane-----	35	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Droughty Too sandy Depth to saturated zone	0.99 0.50 0.19
Leon-----	30	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy	0.99 0.50
Albany-----	25	Somewhat limited Depth to saturated zone	0.48	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
47: Torhunta-----	35	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone	1.00 1.00
Lynn Haven-----	30	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Too sandy Droughty	1.00 1.00 0.50 0.01

Soil Survey of Liberty County, Florida

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
47: Croatan-----	25	Very limited Ponding Depth to saturated zone Flooding Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00 0.80	Very limited Ponding Flooding Organic matter content Depth to saturated zone Too acid	1.00 1.00 1.00 1.00 1.00
48: Meadowbrook, nonhydic-----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.87 0.50
Meadowbrook, hydric-	15	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.87 0.50
49: Meadowbrook, slough-	85	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty Too sandy	1.00 1.00 0.87 0.50
54: Pelham, nonhydic---	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty	1.00 0.82
Pelham, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty	1.00 0.82
55: Plummer, nonhydic--	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
Plummer, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50

Soil Survey of Liberty County, Florida

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
56: Pottsburg, nonhydic-----	60	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	0.99 0.50 0.48
Pottsburg, hydric---	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.48
57: Surrency, depressional-----	35	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Droughty	1.00 1.00 0.34
Pantego, depressional-----	30	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave	1.00 1.00 0.10	Very limited Ponding Depth to saturated zone	1.00 1.00
Croatan, depressional-----	25	Very limited Ponding Depth to saturated zone Subsidence	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone Too acid	1.00 1.00 1.00 1.00
58: Rutlege-----	35	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.96
Bibb-----	30	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone	1.00 1.00
Surrency-----	25	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.34

Soil Survey of Liberty County, Florida

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
59: Hosford-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	1.00 0.50 0.34
60: Sapelo, nonhydic---	65	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.92 0.50
Sapelo, hydric-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
61: Osier-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.77 0.50
62: Scranton, slough----	90	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.64
63: Stilson-----	85	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.99	Somewhat limited Droughty	0.19
65: Pickney-----	40	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone Droughty	1.00 1.00 0.87
Bibb-----	25	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone	1.00 1.00
Dorovan-----	25	Very limited Depth to saturated zone Subsidence Flooding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 1.00 0.80	Very limited Flooding Organic matter content Depth to saturated zone	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
66: Wahee-----	45	Very limited Flooding Low strength Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.19	Very limited Depth to saturated zone Flooding Cutbanks cave	1.00 1.00 0.60 0.10	Somewhat limited Flooding Depth to saturated zone	0.60 0.19
Ochlockonee-----	35	Very limited Flooding	1.00	Very limited Cutbanks cave Depth to saturated zone Flooding	1.00 0.61 0.60	Somewhat limited Flooding	0.60
67: Goldhead-----	85	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.69 0.50
68: Goldhead, depressional-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty Too sandy	1.00 1.00 0.69 0.50
Meadowbrook, depressional-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Droughty Too sandy	1.00 1.00 0.87 0.50
69: Troup-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
70: Troup-----	80	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Too sandy Droughty	0.50 0.34
71: Pits-----	98	Not rated		Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00	Very limited Slope Droughty Too sandy	1.00 0.99 0.50

Soil Survey of Liberty County, Florida

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
73: Foxworth-----	45	Very limited Slope	1.00	Very limited Cutbanks cave Slope Depth to saturated zone	1.00 1.00 0.61	Very limited Slope Too sandy Droughty	1.00 0.50 0.34
Hosford-----	25	Very limited Depth to saturated zone Slope	1.00 0.01	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.01	Very limited Depth to saturated zone Too sandy Droughty Slope	1.00 0.50 0.34 0.01
Lucy-----	20	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.09
74: Garcon-----	40	Very limited Flooding Depth to saturated zone	1.00 0.03	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.60	Somewhat limited Flooding Depth to saturated zone	0.60 0.03
Ochlockonee-----	25	Very limited Flooding	1.00	Very limited Cutbanks cave Depth to saturated zone Flooding	1.00 0.61 0.60	Somewhat limited Flooding	0.60
Ousley-----	25	Very limited Flooding Depth to saturated zone	1.00 0.03	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 1.00 0.60	Very limited Droughty Flooding Too sandy Depth to saturated zone	1.00 0.60 0.50 0.03
75: Brantley-----	35	Very limited Low strength Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Too clayey Cutbanks cave	1.00 0.12 0.10	Very limited Slope	1.00
Okeelala-----	30	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 0.10	Very limited Slope	1.00
Lucy-----	25	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.09
78: Lucy-----	35	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Too sandy Droughty	1.00 0.50 0.09

Soil Survey of Liberty County, Florida

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
78: Blanton-----	30	Very limited Slope	1.00	Very limited Cutbanks cave Slope Depth to saturated zone	1.00 1.00 0.61	Very limited Slope Droughty Too sandy	1.00 0.99 0.50
Cowarts-----	25	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 0.10	Very limited Slope	1.00
81: Scranton-----	85	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty	0.99 0.71
82: Brickyard-----	55	Very limited Depth to saturated zone Flooding Shrink-swell	1.00 1.00 0.50	Very limited Depth to saturated zone Flooding Too clayey Cutbanks cave	1.00 0.80 0.28 0.10	Very limited Flooding Depth to saturated zone	1.00 1.00
Chowan-----	35	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Flooding	1.00 1.00 0.80	Very limited Flooding Depth to saturated zone	1.00 1.00
83: Plummer-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	1.00 0.92 0.50
Sapelo-----	30	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Droughty Too sandy	0.99 0.92 0.50
Pottsburg-----	25	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy Droughty	0.99 0.50 0.48
91: Woodington-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10	Very limited Depth to saturated zone	1.00

Soil Survey of Liberty County, Florida

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
92: Pamlico, frequently flooded-----	50	Very limited Ponding Depth to saturated zone Flooding Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Organic matter content Flooding	1.00 1.00 1.00 1.00 0.80	Very limited Ponding Flooding Organic matter content Depth to saturated zone	1.00 1.00 1.00 1.00
Pickney, frequently flooded-----	35	Very limited Ponding Depth to saturated zone Flooding	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 1.00 0.80	Very limited Ponding Flooding Depth to saturated zone Droughty	1.00 1.00 1.00 0.87
95: Bibb-----	40	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding	1.00 0.60
Rains-----	25	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Cutbanks cave	1.00 0.60 0.10	Very limited Depth to saturated zone Flooding	1.00 0.60
Garcon-----	25	Very limited Flooding Depth to saturated zone	1.00 0.03	Very limited Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.60	Somewhat limited Flooding Depth to saturated zone	0.60 0.03
96: Foxworth-----	50	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Too sandy Droughty	0.50 0.34
Lakeland-----	40	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Too sandy	0.99 0.50
97: Foxworth-----	45	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Somewhat limited Too sandy Droughty	0.50 0.34
Lakeland-----	40	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63	Somewhat limited Droughty Slope Too sandy	0.99 0.63 0.50

Soil Survey of Liberty County, Florida

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
98: Leon, nonhydric-----	45	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy	0.99 0.50
Chipley-----	30	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.87 0.50 0.19
Leon, hydric-----	5	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
99: Water-----	100	Not rated		Not rated		Not rated	
101: Albany-----	55	Somewhat limited Depth to saturated zone	0.48	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00	Very limited Droughty Too sandy Depth to saturated zone	1.00 0.50 0.48
Blanton-----	30	Not limited		Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Very limited Droughty Too sandy	0.99 0.50

Soil Survey of Liberty County, Florida

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 rating classes and limiting features for septic tank absorption fields agree with criteria as set forth in chapter 64E-6 of the Florida Administrative Code, standards for onsite sewage treatment and disposal, effective May 24, 2004. The limiting feature criteria agrees with the standard subsurface drainfield system in chapter 64E-6, FAC. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2: Albany-----	85	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
4: Alpin-----	45	Slightly limited Slope	0.04	Very limited Seepage Slope	1.00 1.00
Foxworth-----	40	Slightly limited		Very limited Seepage Slope Depth to saturated zone	1.00 1.00 0.71
5: Rains-----	50	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00
Bladen-----	45	Severely limited Restricted permeability Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
6: Blanton-----	85	Slightly limited		Very limited Seepage Depth to saturated zone Slope	1.00 0.71 0.08
7: Blanton-----	80	Slightly limited		Very limited Seepage Slope Depth to saturated zone	1.00 1.00 0.71
8: Brickyard-----	75	Severely limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
9: Centenary-----	85	Moderately limited Presence of spodic material	0.50	Very limited Seepage Depth to saturated zone Slope	1.00 0.40 0.08
11: Chipley-----	50	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00

Soil Survey of Liberty County, Florida

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
11: Foxworth-----	40	Slightly limited		Very limited Seepage Depth to saturated zone Slope	 1.00 0.71 0.08
12: Rutlege-----	45	Severely limited Ponding Depth to saturated zone	 1.00 1.00	Very limited Ponding Seepage Depth to saturated zone	 1.00 1.00 1.00
Plummer-----	40	Severely limited Ponding Depth to saturated zone	 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	 1.00 1.00 1.00
13: Dorovan-----	50	Severely limited Ponding Depth to saturated zone Filtering capacity	 1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	 1.00 1.00 1.00
Pamlico-----	45	Severely limited Ponding Depth to saturated zone Filtering capacity	 1.00 1.00 1.00	Very limited Ponding Seepage Depth to saturated zone	 1.00 1.00 1.00
14: Dothan-----	84	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Somewhat limited Seepage	 0.50
15: Dothan-----	85	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Somewhat limited Depth to saturated zone Seepage Slope	 0.99 0.50 0.32
17: Dothan-----	40	Severely limited Depth to saturated zone Restricted permeability Slope	 1.00 0.50 0.16	Very limited Slope Depth to saturated zone Seepage	 1.00 0.99 0.50
Fuquay-----	35	Slightly limited Slope	 0.04	Very limited Slope Seepage Depth to saturated zone	 1.00 1.00 0.71
24: Goldsboro-----	90	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Very limited Depth to saturated zone Seepage	 1.00 0.50
25: Goldsboro-----	90	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Very limited Seepage Depth to saturated zone Slope	 1.00 1.00 0.18

Soil Survey of Liberty County, Florida

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
26: Foxworth-----	80	Slightly limited		Very limited Seepage Depth to saturated zone Slope	 1.00 0.71 0.08
27: Fuquay-----	85	Slightly limited		Very limited Seepage Depth to saturated zone	 1.00 0.71
30: Elloree-----	35	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
Bibb-----	30	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 1.00
Meggett-----	25	Severely limited Restricted permeability Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
31: Hurricane-----	45	Severely limited Depth to saturated zone Presence of spodic material	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
Chipley-----	35	Severely limited Depth to saturated zone	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00
32: Plummer-----	45	Severely limited Ponding Depth to saturated zone	 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	 1.00 1.00 1.00
Pelham-----	40	Severely limited Ponding Depth to saturated zone Restricted permeability	 1.00 1.00 0.50	Very limited Ponding Seepage Depth to saturated zone	 1.00 1.00 1.00
34: Lakeland-----	85	Slightly limited		Very limited Seepage Slope	 1.00 0.08
35: Lakeland-----	85	Slightly limited		Very limited Seepage Slope	 1.00 1.00
36: Lakeland-----	90	Moderately limited Slope	 0.63	Very limited Slope Seepage	 1.00 1.00

Soil Survey of Liberty County, Florida

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
37: Lakeland-----	50	Severely limited Slope	1.00	Very limited Slope Seepage	1.00 1.00
Foxworth-----	40	Severely limited Slope	1.00	Very limited Slope Seepage Depth to saturated zone	1.00 1.00 0.71
38: Leefield-----	85	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08
39: Leon, nonhydic----	70	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Leon, hydic-----	20	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
42: Lucy-----	85	Slightly limited		Very limited Seepage Slope	1.00 0.08
44: Lynchburg-----	80	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00
45: Lynn Haven-----	90	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
46: Hurricane-----	35	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Leon-----	30	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Albany-----	25	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08

Soil Survey of Liberty County, Florida

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
47: Torhunta-----	35	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
Lynn Haven-----	30	Severely limited Flooding Depth to saturated zone Presence of spodic material	 1.00 1.00 0.50	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
Croatan-----	25	Severely limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone	 1.00 1.00 1.00
48: Meadowbrook, nonhydic-----	75	Severely limited Depth to saturated zone	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00
Meadowbrook, hydric-	15	Severely limited Depth to saturated zone	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00
49: Meadowbrook, slough-	85	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
54: Pelham, nonhydic---	65	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
Pelham, hydric-----	20	Severely limited Depth to saturated zone Restricted permeability	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
55: Plummer, nonhydic--	60	Severely limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00
Plummer, hydric-----	20	Severely limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00
56: Pottsburg, nonhydic-----	60	Severely limited Depth to saturated zone Presence of spodic material	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
Pottsburg, hydric---	20	Severely limited Depth to saturated zone Presence of spodic material	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00

Soil Survey of Liberty County, Florida

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
57: Surrency-----	35	Severely limited Ponding Depth to saturated zone Restricted permeability	 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Seepage	 1.00 1.00 1.00
Pantego-----	30	Severely limited Ponding Depth to saturated zone Restricted permeability	 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Seepage	 1.00 1.00 1.00
Croatan-----	25	Severely limited Ponding Depth to saturated zone Filtering capacity	 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	 1.00 1.00 1.00
58: Rutlege-----	35	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
Bibb-----	30	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 1.00
Surrency-----	25	Severely limited Flooding Depth to saturated zone Restricted permeability	 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 1.00
59: Hosford-----	80	Severely limited Depth to saturated zone	 1.00	Very limited Seepage Depth to saturated zone Slope	 1.00 1.00 0.68
60: Sapelo, nonhydic---	65	Severely limited Depth to saturated zone Presence of spodic material	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
Sapelo, hydric-----	20	Severely limited Depth to saturated zone Presence of spodic material	 1.00 0.50	Very limited Seepage Depth to saturated zone	 1.00 1.00
61: Osier-----	80	Severely limited Depth to saturated zone	 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00
62: Scranton, slough----	90	Severely limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
63: Stilson-----	85	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
65: Pickney-----	40	Severely limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00
Bibb-----	25	Severely limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
Dorovan-----	25	Severely limited Flooding Depth to saturated zone Filtering capacity	1.00 1.00 1.00	Very limited Flooding Organic matter content Depth to saturated zone	1.00 1.00 1.00
66: Wahee-----	45	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50
Ochlockonee-----	35	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 0.99 0.50	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 0.71
67: Goldhead-----	85	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
68: Goldhead-----	45	Severely limited Ponding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Very limited Seepage Depth to saturated zone Ponding	1.00 1.00 1.00
Meadowbrook-----	40	Severely limited Ponding Depth to saturated zone	1.00 1.00	Very limited Seepage Depth to saturated zone Ponding	1.00 1.00 1.00
69: Troup-----	85	Slightly limited		Very limited Seepage Slope	1.00 0.08
70: Troup-----	80	Slightly limited		Very limited Seepage Slope	1.00 1.00
71: Pits-----	98	Not rated		Not rated	

Soil Survey of Liberty County, Florida

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
72: Lakeland-----	75	Severely limited Slope	1.00	Very limited Slope Seepage	1.00 1.00
73: Foxworth-----	45	Severely limited Slope	1.00	Very limited Slope Seepage Depth to saturated zone	1.00 1.00 0.71
Hosford-----	25	Severely limited Depth to saturated zone Slope	1.00 0.01	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 1.00
Lucy-----	20	Severely limited Slope	1.00	Very limited Slope Seepage	1.00 1.00
74: Garcon-----	40	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00
Ochlockonee-----	25	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 0.99 0.50	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 0.71
Ousley-----	25	Severely limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00
75: Brantley-----	35	Severely limited Restricted permeability Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.50
Okeelala-----	30	Severely limited Slope Restricted permeability	1.00 0.50	Very limited Slope Seepage	1.00 1.00
Lucy-----	25	Severely limited Slope	1.00	Very limited Slope Seepage	1.00 1.00
78: Lucy-----	35	Severely limited Slope	1.00	Very limited Slope Seepage	1.00 1.00
Blanton-----	30	Severely limited Slope	1.00	Very limited Slope Seepage Depth to saturated zone	1.00 1.00 0.71
Cowarts-----	25	Severely limited Slope Restricted permeability	1.00 0.50	Very limited Slope Seepage	1.00 0.28

Soil Survey of Liberty County, Florida

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
81: Scranton-----	85	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
82: Brickyard-----	55	Severely limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Chowan-----	35	Severely limited Flooding Depth to saturated zone Filtering capacity	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
83: Plummer-----	35	Severely limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00
Sapelo-----	30	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Pottsburg-----	25	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
91: Woodington-----	90	Severely limited Depth to saturated zone Restricted permeability	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00
92: Pamlico-----	50	Severely limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Seepage	1.00 1.00 1.00
Pickney-----	35	Severely limited Ponding Flooding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Flooding Seepage	1.00 1.00 1.00
95: Bibb-----	40	Severely limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
Rains-----	25	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
Garcon-----	25	Severely limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
96: Foxworth-----	50	Slightly limited		Very limited Seepage Depth to saturated zone	1.00 0.71
Lakeland-----	40	Slightly limited		Very limited Seepage Slope	1.00 0.08
97: Foxworth-----	45	Slightly limited		Very limited Seepage Slope Depth to saturated zone	1.00 1.00 0.71
Lakeland-----	40	Moderately limited Slope	0.63	Very limited Slope Seepage	1.00 1.00
98: Leon, nonhydic----	45	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Chipley-----	30	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Leon, hydric-----	5	Severely limited Depth to saturated zone Presence of spodic material	1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
99: Water-----	100	Not rated		Not rated	
101: Albany-----	55	Severely limited Depth to saturated zone	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Blanton-----	30	Slightly limited		Very limited Seepage Depth to saturated zone Slope	1.00 0.71 0.08

Soil Survey of Liberty County, Florida

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 limitation. 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
2: Albany-----	85	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.96
4: Alpin-----	45	Very limited Too sandy Seepage Slope	1.00 1.00 0.04	Very limited Seepage Slope	1.00 0.04	Very limited Too sandy Seepage Slope	1.00 1.00 0.04
Foxworth-----	40	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
5: Rains-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Bladen-----	45	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00
6: Blanton-----	85	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
7: Blanton-----	80	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
8: Brickyard-----	75	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00
9: Centenary-----	85	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00

Soil Survey of Liberty County, Florida

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
11: Chipley-----	50	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
Foxworth-----	40	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
12: Rutlege-----	45	Very limited Depth to saturated zone Ponding Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00
Plummer-----	40	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00
13: Dorovan-----	50	Very limited Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content	1.00 1.00 1.00
Pamlico-----	45	Very limited Depth to saturated zone Ponding Seepage Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Seepage	1.00 1.00 1.00 1.00
14: Dothan-----	84	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone	1.00	Not limited	
15: Dothan-----	85	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone	1.00	Not limited	
17: Dothan-----	40	Very limited Depth to saturated zone Too clayey Slope	1.00 0.50 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Somewhat limited Slope	0.16

Soil Survey of Liberty County, Florida

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
17: Fuquay-----	35	Very limited Depth to saturated zone Slope	1.00 0.04	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 0.04	Somewhat limited Slope	0.04
24: Goldsboro-----	90	Very limited Depth to saturated zone		Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	
25: Goldsboro-----	90	Very limited Depth to saturated zone		Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	
26: Foxworth-----	80	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
27: Fuquay-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Not limited	
30: Elloree-----	35	Very limited Flooding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 0.50
Bibb-----	30	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
Meggett-----	25	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00
31: Hurricane-----	45	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
Chipley-----	35	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86

Soil Survey of Liberty County, Florida

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
32: Plummer-----	45	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00
Pelham-----	40	Very limited Depth to saturated zone Ponding Too sandy	1.00 1.00 1.00 0.50	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too sandy	1.00 1.00 1.00 0.50
34: Lakeland-----	85	Very limited Seepage Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
35: Lakeland-----	85	Very limited Seepage Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
36: Lakeland-----	90	Very limited Seepage Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
37: Lakeland-----	50	Very limited Slope Seepage Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
Foxworth-----	40	Very limited Depth to saturated zone Slope Seepage Too sandy	1.00 1.00 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
38: Leefield-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Somewhat limited Depth to saturated zone	0.86
39: Leon, nonhydic----	70	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Leon, hydric-----	20	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
42: Lucy-----	85	Very limited Seepage	1.00	Very limited Seepage	1.00	Somewhat limited Seepage	0.50
44: Lynchburg-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
45: Lynn Haven-----	90	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
46: Hurricane-----	35	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
Leon-----	30	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Albany-----	25	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.96
47: Torhunta-----	35	Very limited Flooding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Lynn Haven-----	30	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Croatan-----	25	Very limited Flooding Depth to saturated zone Ponding Organic matter content Too acid	1.00 1.00 1.00 1.00 1.00	Very limited Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Too acid Seepage	1.00 1.00 1.00 1.00 0.12

Soil Survey of Liberty County, Florida

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
48: Meadowbrook, nonhydic-----	75	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Meadowbrook, hydric-	15	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
49: Meadowbrook, slough-	85	Very limited Flooding Depth to saturated zone Too sandy	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
54: Pelham, nonhydic---	65	Very limited Depth to saturated zone Too sandy	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
Pelham, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy	1.00 0.50
55: Plummer, nonhydic--	60	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Plummer, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
56: Pottsburg, nonhydic-----	60	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Pottsburg, hydric---	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
57: Surrency, depressional-----	35	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 0.21
Pantego, depressional-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Croatan, depressional-----	25	Very limited Depth to saturated zone Ponding Organic matter content Too acid	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Too acid Seepage	1.00 1.00 1.00 1.00 0.12
58: Rutlege-----	35	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Bibb-----	30	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
Surrency-----	25	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.21
59: Hosford-----	80	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
60: Sapelo, nonhydric---	65	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
60: Sapelo, hydric-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
61: Osier-----	80	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
62: Scranton, slough----	90	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
63: Stilson-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Somewhat limited Depth to saturated zone	0.24
65: Pickney-----	40	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Bibb-----	25	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
Dorovan-----	25	Very limited Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Organic matter content	1.00 1.00
66: Wahee-----	45	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone Too clayey	0.86 0.50
Ochlockonee-----	35	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Seepage Too sandy	0.50 0.50

Soil Survey of Liberty County, Florida

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
67: Goldhead-----	85	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00
68: Goldhead, depressional-----	45	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 1.00
Meadowbrook, depressional-----	40	Very limited Depth to saturated zone Too sandy Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
69: Troup-----	85	Very limited Too sandy	1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
70: Troup-----	80	Very limited Too sandy	1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
71: Pits-----	98	Not rated		Not rated		Not rated	
72: Lakeland-----	75	Very limited Slope Seepage Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
73: Foxworth-----	45	Very limited Depth to saturated zone Seepage Too sandy Slope	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 1.00	Very limited Too sandy Seepage Slope	1.00 1.00 1.00
Hosford-----	25	Very limited Depth to saturated zone Seepage Too sandy Slope	1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 0.01	Very limited Depth to saturated zone Too sandy Seepage Slope	1.00 1.00 1.00 0.01
Lucy-----	20	Very limited Slope Seepage	1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.50

Soil Survey of Liberty County, Florida

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
74:							
Garcon-----	40	Very limited Flooding Depth to saturated zone Too sandy	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.68
Ochlockonee-----	25	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Seepage Too sandy	0.50 0.50
Ousley-----	25	Very limited Flooding Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.68
75:							
Brantley-----	35	Very limited Too clayey Slope	1.00 1.00	Very limited Slope	1.00	Very limited Too clayey Slope	1.00 1.00
Okeelala-----	30	Very limited Slope Seepage	1.00 1.00	Very limited Slope	1.00	Very limited Slope	1.00
Lucy-----	25	Very limited Seepage Slope	1.00 0.63	Very limited Seepage Slope	1.00 0.63	Somewhat limited Slope Seepage	0.63 0.50
78:							
Lucy-----	35	Very limited Slope Seepage	1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Slope Seepage	1.00 0.50
Blanton-----	30	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 1.00	Very limited Too sandy Seepage Slope	1.00 1.00 1.00
Cowarts-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
81:							
Scranton-----	85	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
82:							
Brickyard-----	55	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00

Soil Survey of Liberty County, Florida

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
82: Chowan-----	35	Very limited Flooding Depth to saturated zone Organic matter content Seepage	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Too clayey Seepage	1.00 1.00 1.00 0.50 0.16
83: Plummer-----	35	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Sapelo-----	30	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Pottsburg-----	25	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
91: Woodington-----	90	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
92: Pamlico, frequently flooded-----	50	Very limited Flooding Depth to saturated zone Ponding Seepage Organic matter content	1.00 1.00 1.00 1.00 1.00	Very limited Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Organic matter content Seepage	1.00 1.00 1.00 1.00
Pickney, frequently flooded-----	35	Very limited Flooding Depth to saturated zone Ponding Seepage Too sandy	1.00 1.00 1.00 1.00 1.00	Very limited Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00	Very limited Ponding Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00 1.00
95: Bibb-----	40	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50

Soil Survey of Liberty County, Florida

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
95: Rains-----	25	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
Garcon-----	25	Very limited Flooding Depth to saturated zone Too sandy	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Depth to saturated zone	1.00 0.68
96: Foxworth-----	50	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
Lakeland-----	40	Very limited Seepage Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
97: Foxworth-----	45	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00
Lakeland-----	40	Very limited Seepage Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
98: Leon, nonhydric-----	45	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
Chipley-----	30	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
Leon, hydric-----	5	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	1.00 1.00 1.00
99: Water-----	100	Not rated		Not rated		Not rated	

Soil Survey of Liberty County, Florida

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
101: Albany-----	55	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.96
Blanton-----	30	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage	1.00 1.00

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2: Albany-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.12
4: Alpin-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.46
		Thickest layer	0.00	Thickest layer	0.71
Foxworth-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.59
5: Rains-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bladen-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
6: Blanton-----	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.04
		Bottom layer	0.00	Thickest layer	0.69
7: Blanton-----	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.04
		Thickest layer	0.00	Thickest layer	0.69
8: Brickyard-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
9: Centenary-----	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.58
		Bottom layer	0.00	Thickest layer	0.71
11: Chipley-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.68
Foxworth-----	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.51
		Bottom layer	0.00	Bottom layer	0.59

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
12: Rutlege-----	45	Poor Bottom layer Thickest layer	0.00 0.00	Fair Thickest layer Bottom layer	0.15 0.16
Plummer-----	40	Poor Thickest layer Bottom layer	0.00 0.00	Fair Bottom layer Thickest layer	0.03 0.47
13: Dorovan-----	50	Poor Bottom layer Thickest layer Organic matter content	0.00 0.00 0.00	Poor Bottom layer Thickest layer Organic matter content	0.00 0.00 0.00
Pamlico-----	45	Poor Thickest layer Bottom layer	0.00 0.00	Fair Thickest layer Bottom layer	0.00 0.34
14: Dothan-----	84	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00
15: Dothan-----	85	Poor Thickest layer Bottom layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00
17: Dothan-----	40	Poor Bottom layer Thickest layer	0.00 0.00	Poor Bottom layer Thickest layer	0.00 0.00
Fuquay-----	35	Poor Bottom layer Thickest layer	0.00 0.00	Fair Bottom layer Thickest layer	0.02 0.06
24: Goldsboro-----	90	Poor Bottom layer Thickest layer	0.00 0.00	Fair Bottom layer Thickest layer	0.02 0.11
25: Goldsboro-----	90	Poor Thickest layer Bottom layer	0.00 0.00	Fair Bottom layer Thickest layer	0.02 0.05
26: Foxworth-----	80	Poor Bottom layer Thickest layer	0.00 0.00	Fair Thickest layer Bottom layer	0.51 0.59
27: Fuquay-----	85	Poor Thickest layer Bottom layer	0.00 0.00	Fair Bottom layer Thickest layer	0.02 0.06

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
30: Elloree-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.44
Bibb-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.00	Bottom layer	0.10
Meggett-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
31: Hurricane-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.59
		Thickest layer	0.00	Thickest layer	0.69
Chipley-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.68
32: Plummer-----	45	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.00	Thickest layer	0.47
Pelham-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
34: Lakeland-----	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.61
		Bottom layer	0.00	Bottom layer	0.69
35: Lakeland-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.61
		Thickest layer	0.00	Bottom layer	0.69
36: Lakeland-----	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.61
		Bottom layer	0.00	Bottom layer	0.69
37: Lakeland-----	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.61
		Bottom layer	0.00	Bottom layer	0.69
Foxworth-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.59
38: Leefield-----	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.00	Thickest layer	0.28

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
39: Leon, nonhydic-----	70	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.79
		Bottom layer	0.00	Thickest layer	0.83
Leon, hydric-----	20	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.79
		Bottom layer	0.00	Thickest layer	0.83
42: Lucy-----	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.00	Thickest layer	0.52
44: Lynchburg-----	80	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
45: Lynn Haven-----	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.29
		Bottom layer	0.00	Thickest layer	0.33
46: Hurricane-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.59
		Thickest layer	0.00	Thickest layer	0.69
Leon-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.79
		Thickest layer	0.00	Thickest layer	0.83
Albany-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.12
47: Torhunta-----	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.42
Lynn Haven-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.29
		Thickest layer	0.00	Thickest layer	0.33
Croatan-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
48: Meadowbrook, nonhydic-----	75	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.08
		Bottom layer	0.00	Thickest layer	0.64
Meadowbrook, hydric-	15	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.08
		Bottom layer	0.00	Thickest layer	0.64

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
49: Meadowbrook, slough-	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.64
54: Pelham, nonhydric---	65	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Pelham, hydric-----	20	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.05
55: Plummer, nonhydric--	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.00	Thickest layer	0.47
Plummer, hydric-----	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.47
56: Pottsburg, nonhydric-----	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.64
		Bottom layer	0.00	Bottom layer	0.75
Pottsburg, hydric---	20	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.64
		Bottom layer	0.00	Bottom layer	0.75
57: Surrency, depressional-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.07
Pantego, depressional-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.02
Croatan, depressional-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
58: Rutlege-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.15
		Thickest layer	0.00	Bottom layer	0.16
Bibb-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.00	Bottom layer	0.10
Surrency-----	25	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.00	Bottom layer	0.07

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
59: Hosford-----	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.64
60: Sapelo, nonhydric---	65	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.59
Sapelo, hydric-----	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.59
61: Osier-----	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.71
62: Scranton, slough----	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.10
		Bottom layer	0.00	Bottom layer	0.33
63: Stilson-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.34
65: Pickney-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.14
		Thickest layer	0.00	Bottom layer	0.19
Bibb-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.10
Dorovan-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
		Organic matter content	0.00	Organic matter content	0.00
66: Wahee-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Ochlockonee-----	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.06
		Bottom layer	0.00	Bottom layer	0.11
67: Goldhead-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.53

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
68: Goldhead, depressional-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.53
Meadowbrook, depressional-----	40	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.08
		Bottom layer	0.00	Thickest layer	0.64
69: Troup-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.25
70: Troup-----	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.25
71: Pits-----	98	Not rated		Not rated	
72: Lakeland-----	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.61
		Thickest layer	0.00	Bottom layer	0.69
73: Foxworth-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.59
Hosford-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.64
Lucy-----	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.52
74: Garcon-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.11
Ochlockonee-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.11
Ousley-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.76
		Thickest layer	0.00	Bottom layer	0.76
75: Brantley-----	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.05

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
75: Okeelala-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.08
Lucy-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.52
78: Lucy-----	35	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.00	Thickest layer	0.52
Blanton-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.04
		Thickest layer	0.00	Thickest layer	0.69
Cowarts-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.02
81: Scranton-----	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.00	Thickest layer	0.17
82: Brickyard-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chowan-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
83: Plummer-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.47
Sapelo-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.59
Pottsburg-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.75
91: Woodington-----	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.07
92: Pamlico, frequently flooded-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.34

Soil Survey of Liberty County, Florida

Table 14.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
92: Pickney, frequently flooded-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.14
		Thickest layer	0.00	Bottom layer	0.19
95: Bibb-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.10
Rains-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Garcon-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.11
96: Foxworth-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.51
		Thickest layer	0.00	Bottom layer	0.59
Lakeland-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.61
		Thickest layer	0.00	Bottom layer	0.69
97: Foxworth-----	45	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.51
		Bottom layer	0.00	Bottom layer	0.59
Lakeland-----	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.61
		Bottom layer	0.00	Bottom layer	0.69
98: Leon, nonhydic-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.79
		Thickest layer	0.00	Thickest layer	0.83
Chipley-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.64
		Bottom layer	0.00	Bottom layer	0.68
Leon, hydric-----	5	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.79
		Bottom layer	0.00	Thickest layer	0.83
99: Water-----	100	Not rated		Not rated	
101: Albany-----	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.12
Blanton-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.04
		Thickest layer	0.00	Thickest layer	0.69

Table 15.--Engineering Properties

[Absence of an entry indicates that the data were not estimated]

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
2: Albany-----	0-6	Sand	SM	A-2	0	0	100	100	86-95	17-26	0-14	NP
	6-47	Sand	SM	A-2	0	0	100	100	87-96	16-25	0-14	NP
	47-80	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2, A-6	0	0	97-100	92-100	72-100	22-46	0-40	NP-17
4: Alpin-----	0-10	Sand	SP-SM, SM	A-3, A-2-4	0	0	95-100	85-100	65-84	8-16	0-14	NP
	10-45	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	95-100	85-100	65-82	7-15	0-14	NP
	45-80	Sand, fine sand	SM, SP-SM	A-2-4	0	0	95-100	86-100	66-81	10-15	0-14	NP
Foxworth-----	0-9	Sand	SP-SM	A-2-4, A-3	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
5: Rains-----	0-4	Sandy loam	SM, SC	A-4, A-2-4	0	0	95-100	86-100	60-81	28-44	0-30	NP-10
	4-13	Sandy loam	SM, SC	A-4, A-2-4	0	0	95-100	86-100	61-82	29-45	0-30	NP-10
	13-65	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, CL-ML, CL	A-6, A-4, A-2	0	0	100	95-100	73-94	35-56	18-40	4-20
	65-80	Sandy clay, clay loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-7, A-6, A-4	0	0	100	98-100	66-89	33-56	18-45	4-28
Bladen-----	0-5	Fine sandy loam	SM	A-4, A-2	0	0	100	96-100	84-97	35-51	0-14	NP
	5-14	Fine sandy loam, sandy loam, loam	SM	A-4, A-2	0	0	100	96-100	84-97	35-49	0-14	NP
	14-40	Clay, sandy clay	CH, CL	A-7	0	0	100	98-100	83-100	67-88	45-67	23-45
	40-80	Clay, sandy clay, clay loam	CH, CL	A-7	0	0	100	91-100	71-100	61-100	25-60	8-35
6: Blanton-----	0-8	Sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	8-15	0-14	NP
	8-59	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	7-14	0-14	NP
	59-73	Loamy sand, loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0	0	100	95-100	76-88	22-31	0-25	NP-3
	73-80	Fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4, A-2-6, A-6	0	0	100	95-100	83-100	27-51	12-45	3-22

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
7: Blanton-----	0-8	Sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	8-15	0-14	NP
	8-59	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	7-14	0-14	NP
	59-73	Loamy sand, loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0	0	100	95-100	76-88	22-31	0-25	NP-3
	73-80	Fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4, A-2-6, A-6	0	0	100	95-100	83-100	27-51	12-45	3-22
8: Brickyard-----	0-4	Clay loam	MH, CL, CH	A-7	0	0	100	98-100	81-100	64-98	41-70	15-40
	4-50	Clay, silty clay, silty clay loam	CH, CL, MH	A-7	0	0	100	98-100	78-100	66-92	41-75	15-45
	50-80	Clay, silty clay, silty clay loam	CH, CL, MH, OH	A-7, A-6	0	0	100	98-100	77-100	60-94	30-70	11-40
9: Centenary-----	0-5	Sand	SP-SM, SM	A-3	0	0	100	100	76-83	10-17	0-14	NP
	5-68	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	76-83	8-15	0-14	NP
	68-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	76-84	9-17	0-14	NP
11: Chipley-----	0-6	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	8-12	0-14	NP
	6-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-81	8-14	0-14	NP
Foxworth-----	0-9	Sand	SP-SM	A-2-4, A-3	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
12: Rutlege-----	0-12	Fine sand	SM	A-2	0	0	95-100	89-100	81-99	13-22	0-14	NP
	12-80	Fine sand, loamy fine sand, loamy sand	SM	A-2	0	0	95-100	90-100	83-100	13-22	0-20	NP
Plummer-----	0-10	Sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	75-81	10-17	0-14	NP
	10-55	Sand, loamy sand, fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-16	0-14	NP
	55-64	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	97-100	76-93	29-45	0-30	NP-10
	64-80	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A- 2-4	0	0	100	97-100	74-91	28-44	0-40	NP-12
13: Dorovan-----	0-53	Muck	PT	A-8	0	0	---	---	---	---	---	---
	53-80	Muck	PT	A-8	0	0	---	---	---	---	---	---

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
13: Pamlico-----	0-45	Muck	PT	A-8	0	0	---	---	---	---	---	---
	45-80	Sand, fine sand, loamy sand	SM, SP-SM	A-2, A-3	0	0	100	100	78-83	10-19	0-14	NP
14: Dothan-----	0-6	Loamy sand	SM	A-2	0	0	95-100	86-100	65-85	17-30	0-14	NP
	6-12	Loamy fine sand	SM	A-2	0	0	95-100	86-100	78-100	22-36	0-14	NP
	12-35	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2	0	0	95-100	87-100	67-94	32-54	0-40	NP-16
	35-80	Clay loam, sandy clay loam, sandy clay	SC, SC-SM, CL-ML, CL	A-6, A-4, A-7	0	0	95-100	87-100	61-92	38-66	25-45	4-23
15: Dothan-----	0-6	Loamy sand	SM	A-2	0	0	95-100	86-100	65-85	17-30	0-14	NP
	6-12	Loamy fine sand	SM	A-2	0	0	95-100	86-100	78-100	22-36	0-14	NP
	12-35	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2	0	0	95-100	87-100	67-94	32-54	0-40	NP-16
	35-80	Clay loam, sandy clay loam, sandy clay	SC, SC-SM, CL-ML, CL	A-6, A-4, A-7	0	0	95-100	87-100	61-92	38-66	25-45	4-23
17: Dothan-----	0-6	Loamy sand	SM	A-2	0	0	95-100	86-100	65-85	17-30	0-14	NP
	6-12	Loamy fine sand	SM	A-2	0	0	95-100	86-100	78-100	22-36	0-14	NP
	12-35	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2	0	0	95-100	87-100	67-94	32-54	0-40	NP-16
	35-80	Clay loam, sandy clay loam, sandy clay	SC, SC-SM, CL-ML, CL	A-6, A-4, A-7	0	0	95-100	87-100	61-92	38-66	25-45	4-23
Fuquay-----	0-6	Loamy sand	SM, SP-SM	A-2, A-3	0	0	95-100	86-100	65-83	10-24	0-14	NP
	6-26	Sand, loamy sand	SM, SP-SM	A-2, A-3	0	0	95-100	86-100	64-83	10-21	0-14	NP
	26-50	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM	A-2-4, A-4, A-6	0	0	86-100	72-100	54-100	21-54	20-45	NP-13
	50-80	Sandy clay loam, fine sandy loam, sandy loam	SC-SM, SM	A-6, A-4, A-2	0	0	86-100	72-100	52-97	20-52	20-45	NP-13
24: Goldsboro-----	0-4	Loamy sand	SM	A-2	0	0	95-100	91-100	68-81	15-22	0-20	NP
	4-14	Loamy fine sand, loamy sand	SM	A-2	0	0	95-100	91-100	82-97	22-30	0-20	NP
	14-80	Sandy clay loam, sandy loam, clay loam	SC, SC-SM, CL-ML, CL	A-6, A-4, A-2	0	0	98-100	93-100	73-95	31-50	16-37	4-18

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
25: Goldsboro-----	0-4	Loamy sand	SM	A-2	0	0	95-100	91-100	68-81	15-22	0-20	NP
	4-14	Loamy fine sand, loamy sand	SM	A-2	0	0	95-100	91-100	82-97	22-30	0-20	NP
	14-80	Sandy clay loam, sandy loam, clay loam	SC, SC-SM, CL-ML, CL	A-6, A-4, A-2	0	0	98-100	93-100	73-95	31-50	16-37	4-18
26: Foxworth-----	0-9	Sand	SP-SM	A-3, A-2-4	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
27: Fuquay-----	0-6	Loamy sand	SM, SP-SM	A-2, A-3	0	0	95-100	86-100	65-83	10-24	0-14	NP
	6-26	Sand, loamy sand	SM, SP-SM	A-2, A-3	0	0	95-100	86-100	64-83	10-21	0-14	NP
	26-50	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM	A-2-4, A-4, A-6	0	0	86-100	72-100	54-100	21-54	20-45	NP-13
	50-80	Sandy clay loam, fine sandy loam, sandy loam	SC-SM, SM	A-6, A-4, A-2	0	0	86-100	72-100	52-97	20-52	20-45	NP-13
30: Elloree-----	0-5	Loamy sand	SM	A-2	0	0	100	98-100	73-80	20-27	0-25	NP-4
	5-29	Sand, loamy sand, fine sand	SM, SP-SM	A-2, A-3	0	0	100	98-100	74-80	10-15	0-14	NP
	29-45	Sandy loam, sandy clay loam, fine sandy loam	SM, SC-SM, SC	A-2-4	0	0	100	98-100	67-84	29-46	0-30	NP-12
	45-57	Loamy sand, fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0	0	100	98-100	75-90	18-36	0-40	NP-18
	57-80	Sand, loamy sand, sandy loam, sandy clay loam	SM, SC-SM	A-2-4, A-4	0	0	100	98-100	78-99	14-36	0-40	NP-18
Bibb-----	0-5	Fine sandy loam	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	24-44	0-25	NP-7
	5-15	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	25-45	0-25	NP-7
	15-45	Sandy loam, loam, silt loam	SM, SC-SM	A-4, A-2-4	0	0-7	70-100	34-100	23-83	9-43	0-30	NP-7
	45-80	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	25-90	7-36	0-30	NP-7
Meggett-----	0-4	Sandy loam	SM	A-4, A-2	0	0	100	94-100	63-82	24-40	0-14	NP
	4-13	Sandy loam, fine sandy loam, loamy fine sand	SM	A-4, A-2	0	0	100	94-100	63-82	23-40	0-14	NP
	13-21	Sandy clay, clay, clay loam	CL, CH, MH	A-7, A-6	0	0	100	90-100	67-100	42-77	30-60	11-30
	21-72	Clay, sandy clay, clay loam	CH, CL, MH, ML	A-7, A-6	0	0	100	91-100	72-100	61-92	35-65	11-30
	72-80	Sandy clay, clay, sandy clay loam	SC, ML, MH	A-7, A-6	0	0	91-100	62-100	45-99	26-67	30-60	7-25

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
31: Hurricane-----	0-8	Sand	SP-SM	A-3	0	0	100	100	76-79	10-13	0-14	NP
	8-64	Sand, fine sand	SP-SM	A-3	0	0	100	100	76-79	9-12	0-14	NP
	64-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	76-82	9-15	0-14	NP
Chipley-----	0-6	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	8-12	0-14	NP
	6-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-81	8-14	0-14	NP
32: Plummer-----	0-10	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	75-81	10-17	0-14	NP
	10-55	Sand, loamy sand, fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-16	0-14	NP
	55-64	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	97-100	76-93	29-45	0-30	NP-10
	64-80	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2-4	0	0	100	97-100	74-91	28-44	0-40	NP-12
Pelham-----	0-7	Loamy sand	SM	A-2	0	0	100	95-100	72-83	23-31	0-14	NP
	7-37	Loamy fine sand, loamy sand, sand	SM	A-2	0	0	100	95-100	87-98	25-33	0-14	NP
	37-48	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-4, A-6	0	0	100	95-100	69-88	34-51	15-30	2-12
	48-80	Sandy clay loam, sandy loam, sandy clay	SC, SM, ML, CL	A-6, A-2, A-4, A-7	0	0	100	95-100	70-99	35-64	20-45	3-20
34: Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
35: Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
36: Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
37: Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
Foxworth-----	0-9	Sand	SP-SM	A-2-4, A-3	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
38: Leefield-----	0-3	Loamy sand	SM	A-2	0	0	98-100	93-100	70-82	20-29	0-14	NP
	3-21	Sand, loamy sand, loamy fine sand	SM	A-2	0	0	98-100	93-100	72-85	14-22	0-14	NP
	21-33	Sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-4, A-6	0	0	95-100	89-100	62-80	24-37	0-40	NP-16
	33-80	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2	0	0	95-100	90-100	69-92	28-46	0-40	NP-20
39: Leon, nonhydic-	0-4	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	9-13	0-14	NP
	4-18	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	6-9	0-14	NP
	18-27	Sand, fine sand, loamy sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-17	0-14	NP
	27-80	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	7-10	0-14	NP
Leon, hydric----	0-4	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	9-13	0-14	NP
	4-18	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	6-9	0-14	NP
	18-27	Sand, fine sand, loamy sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-17	0-14	NP
	27-80	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	7-10	0-14	NP
42: Lucy-----	0-8	Sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	8-18	0-14	NP
	8-26	Sand, loamy sand, fine sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	7-17	0-14	NP
	26-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-6, A-4, A-2	0	0	97-100	91-100	61-87	20-42	10-30	NP-15
44: Lynchburg-----	0-5	Loamy sand	SM	A-2	0	0	92-100	83-100	61-82	18-29	0-25	NP-4
	5-14	Fine sandy loam, loamy sand, sand	SM, SC-SM	A-4, A-2	0	0	92-100	82-100	68-97	24-42	0-30	NP-7
	14-48	Sandy clay loam, sandy loam, clay loam	SC, SC-SM, CL-ML, CL	A-6, A-4, A-2	0	0	91-100	81-100	63-95	33-58	15-40	4-18
	48-80	Clay loam, sandy clay, clay	CL-ML, SC, CL, SC-SM	A-6, A-4	0	0	95-100	86-100	66-100	42-72	15-40	4-20
45: Lynn Haven-----	0-3	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	8-12	0-14	NP
	3-29	Fine sand, sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	93-96	10-13	0-14	NP
	29-35	Fine sand, sand, loamy sand	SM	A-2-4	0	0	100	100	92-98	14-20	0-14	NP
	35-80	Fine sand, sand	SP-SM	A-3, A-2-4	0	0	100	100	93-96	10-14	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
46: Hurricane-----	0-8	Sand	SP-SM	A-3	0	0	100	100	76-79	10-13	0-14	NP
	8-64	Sand, fine sand	SP-SM	A-3	0	0	100	100	76-79	9-12	0-14	NP
	64-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	76-82	9-15	0-14	NP
Leon-----	0-4	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	9-13	0-14	NP
	4-18	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	6-9	0-14	NP
	18-27	Sand, fine sand, loamy sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	76-82	10-17	0-14	NP
	27-80	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	7-10	0-14	NP
Albany-----	0-6	Sand	SM	A-2	0	0	100	100	86-95	17-26	0-14	NP
	6-47	Sand	SM	A-2	0	0	100	100	87-96	16-25	0-14	NP
	47-80	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2, A-6	0	0	97-100	92-100	72-100	22-46	0-40	NP-17
47: Torhunta-----	0-13	Fine sandy loam	SM, SC-SM	A-4, A-2-4	0	0	100	95-100	82-97	30-42	15-25	NP-4
	13-35	Fine sandy loam, sandy loam	SM, SC-SM	A-4, A-2-4	0	0	100	95-100	80-97	30-45	15-25	NP-7
	35-80	Sand, loamy sand, sandy loam	SM, SP-SM, SC-SM	A-3, A-2-4	0	0	100	95-100	71-91	10-26	10-25	NP-4
Lynn Haven-----	0-3	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	8-12	0-14	NP
	3-29	Fine sand, sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	93-96	10-13	0-14	NP
	29-35	Fine sand, sand, loamy sand	SM	A-2-4	0	0	100	100	92-98	14-20	0-14	NP
	35-80	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	100	100	93-96	10-14	0-14	NP
Croatan-----	0-48	Muck	PT	A-8	0	0	---	---	---	---	---	---
	48-62	Sandy loam, mucky sandy loam, fine sandy loam	SM, SC-SM, SC	A-4, A-2	0	0	100	100	71-83	33-45	0-30	NP-10
	62-80	Sandy clay, clay loam, sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-7, A-6, A-4	0	0	100	100	59-89	27-57	18-42	4-15
48: Meadowbrook, nonhydric-----	0-6	Sand	SP-SM	A-3	0	0	100	95-100	72-78	9-12	0-14	NP
	6-46	Sand, fine sand	SP-SM	A-3	0	0	100	95-100	71-80	7-12	0-14	NP
	46-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2-6, A-2-4	0	0	100	95-100	65-79	23-36	0-35	NP-20

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
48: Meadowbrook, hydric-----	0-6	Sand	SP-SM	A-3	0	0	100	95-100	72-78	9-12	0-14	NP
	6-46	Sand, fine sand	SP-SM	A-3	0	0	100	95-100	71-80	7-12	0-14	NP
	46-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2-4, A-2-6	0	0	100	95-100	65-79	23-36	0-35	NP-20
49: Meadowbrook, slough-----	0-6	Sand	SP-SM	A-3	0	0	100	95-100	72-78	9-12	0-14	NP
	6-46	Sand, fine sand	SP-SM	A-3	0	0	100	95-100	71-80	7-12	0-14	NP
	46-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2-4, A-2-6	0	0	100	95-100	65-79	23-36	0-35	NP-20
54: Pelham, nonhydric-----	0-7	Loamy sand	SM	A-2	0	0	100	95-100	72-83	23-31	0-14	NP
	7-37	Loamy fine sand, loamy sand, sand	SM	A-2	0	0	100	95-100	87-98	25-33	0-14	NP
	37-48	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-4, A-6	0	0	100	95-100	69-88	34-51	15-30	2-12
	48-80	Sandy clay loam, sandy loam, sandy clay	SC, SM, ML, CL	A-6, A-2, A- 4, A-7	0	0	100	95-100	70-99	35-64	20-45	3-20
Pelham, hydric--	0-7	Loamy sand	SM	A-2	0	0	100	95-100	72-83	23-31	0-14	NP
	7-37	Loamy fine sand, loamy sand, sand	SM	A-2	0	0	100	95-100	87-98	25-33	0-14	NP
	37-48	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-4, A-6	0	0	100	95-100	69-88	34-51	15-30	2-12
	48-80	Sandy clay loam, sandy loam, sandy clay	SC, SM, ML, CL	A-6, A-2, A- 4, A-7	0	0	100	95-100	70-99	35-64	20-45	3-20
55: Plummer, nonhydric-----	0-10	Sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	75-81	10-17	0-14	NP
	10-55	Sand, loamy sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	76-82	10-16	0-14	NP
	55-64	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	97-100	76-93	29-45	0-30	NP-10
	64-80	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A- 2-4	0	0	100	97-100	74-91	28-44	0-40	NP-12

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
55: Plummer, hydric-	0-10	Sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	75-81	10-17	0-14	NP
	10-55	Sand, loamy sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	76-82	10-16	0-14	NP
	55-64	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	97-100	76-93	29-45	0-30	NP-10
	64-80	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2-4	0	0	100	97-100	74-91	28-44	0-40	NP-12
56: Pottsburg, nonhydric-----	0-8	Sand	SP-SM	A-3	0	0	100	100	77-80	9-12	0-14	NP
	8-57	Sand, fine sand	SP-SM, SM	A-3	0	0	100	100	76-80	9-13	0-14	NP
	57-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	75-80	7-13	0-14	NP
Pottsburg, hydric-----	0-8	Sand	SP-SM	A-3	0	0	100	100	77-80	9-12	0-14	NP
	8-57	Sand, fine sand	SP-SM, SM	A-3	0	0	100	100	76-80	9-13	0-14	NP
	57-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	75-80	7-13	0-14	NP
57: Surrency, depressional---	0-13	Loamy sand	SM	A-2	0	0	100	95-100	70-81	18-27	0-14	NP
	13-27	Sand, loamy sand, fine sand	SM, SP-SM	A-2-4	0	0	100	95-100	72-84	10-19	0-14	NP
	27-44	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, SM	A-2	0	0	100	95-100	70-86	25-40	0-30	NP-10
	44-80	Sandy loam, fine sandy loam, sandy clay loam	SC, SC-SM, SM	A-2	0	0	100	95-100	64-80	23-37	0-30	NP-10
Pantego, depressional---	0-16	Fine sandy loam	SM	A-4, A-2	0	0	100	95-100	81-95	30-42	20-35	NP-10
	16-80	Sandy clay loam, sandy loam, clay loam	SC, SM, ML	A-6, A-4, A-2	0	0	100	94-100	74-95	35-59	20-40	4-16
Croatan, depressional---	0-48	Muck	PT	A-8	0	0	---	---	---	---	---	---
	48-62	Sandy loam, mucky sandy loam, fine sandy loam	SM, SC-SM, SC	A-2, A-4	0	0	100	100	71-83	33-45	0-30	NP-10
	62-80	Sandy clay, clay loam, sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-7, A-6, A-4	0	0	100	100	59-89	27-57	18-42	4-15

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
58: Rutlege-----	0-12	Fine sand	SM, SP-SM	A-2-4	0	0	95-100	89-100	81-99	12-22	0-14	NP
	12-80	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4	0	0	95-100	90-100	83-100	12-22	0-20	NP
Bibb-----	0-5	Fine sandy loam	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	24-44	0-25	NP-7
	5-15	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	25-45	0-25	NP-7
	15-45	Sandy loam, loam, silt loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	23-83	9-43	0-30	NP-7
	45-80	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	25-90	7-36	0-30	NP-7
Surrency-----	0-13	Loamy sand	SM	A-2	0	0	100	95-100	70-81	18-27	0-14	NP
	13-27	Sand, loamy sand, fine sand	SM, SP-SM	A-2-4	0	0	100	95-100	72-84	10-19	0-14	NP
	27-44	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, SM	A-2	0	0	100	95-100	70-86	25-40	0-30	NP-10
	44-80	Sandy loam, fine sandy loam, sandy clay loam	SC, SC-SM, SM	A-2	0	0	100	95-100	64-80	23-37	0-30	NP-10
59: Hosford-----	0-66	Mucky coarse sand	SP-SM, SM	A-2-4, A-3	0	0	95-100	89-100	68-82	10-17	0-14	NP
	66-80	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	95-100	90-100	69-82	8-15	0-20	NP
60: Sapelo, nonhydric-----	0-5	Sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	10-13	0-14	NP
	5-12	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	9-13	0-14	NP
	12-17	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	76-80	10-15	0-14	NP
	17-51	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	77-80	10-13	0-14	NP
	51-80	Sandy loam, sandy clay loam, fine sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	65-85	22-42	0-40	NP-20
Sapelo, hydric--	0-5	Sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	10-13	0-14	NP
	5-12	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	9-13	0-14	NP
	12-17	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	76-80	10-15	0-14	NP
	17-51	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	77-80	10-13	0-14	NP
	51-80	Sandy loam, sandy clay loam, fine sandy loam	SM, SC-SM, SC	A-2-4, A-4, A-6	0	0	100	100	65-85	22-42	0-40	NP-20
61: Osier-----	0-7	Sand	SP-SM	A-3, A-2	0	0	100	98-100	73-82	8-15	0-14	NP
	7-36	Fine sand, sand	SP-SM, SM	A-3, A-2	0	0	100	95-100	71-82	7-15	0-14	NP
	36-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	90-100	69-79	8-12	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
62: Scranton, slough	0-9	Loamy sand	SM	A-2	0	0	100	95-100	74-85	20-28	0-14	NP
	9-18	Fine sand, sand, loamy sand	SM	A-2	0	0	100	95-100	71-84	21-31	0-14	NP
	18-80	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	95-100	71-81	10-17	0-14	NP
63: Stilson-----	0-6	Fine sand	SM	A-2	0	0	95-100	90-100	83-97	15-22	0-14	NP
	6-26	Sand, fine sand	SP-SM, SM	A-2	0	0	95-100	90-100	68-81	11-17	0-14	NP
	26-30	Sandy loam, sandy clay loam	SM, SC-SM, SC	A-6, A-2, A-4	0	0	90-100	78-100	56-87	23-45	0-29	NP-13
	30-80	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2-6, A-6, A-2-4, A-4	0	0	97-100	91-100	68-94	28-51	0-40	NP-20
65: Pickney-----	0-27	Mucky fine sand	SM, SP-SM	A-2	0	0	100	100	92-100	11-23	0-14	NP
	27-80	Fine sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	91-100	10-21	0-14	NP
Bibb-----	0-5	Fine sandy loam	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	24-44	0-25	NP-7
	5-15	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	25-45	0-25	NP-7
	15-45	Sandy loam, loam, silt loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	23-83	9-43	0-30	NP-7
	45-80	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	25-90	7-36	0-30	NP-7
Dorovan-----	0-53	Muck	PT	A-8	0	0	---	---	---	---	---	---
	53-80	Muck	PT	A-8	0	0	---	---	---	---	---	---
66: Wahee-----	0-6	Sandy loam	SM, SC-SM	A-4, A-2	0	0	100	95-100	67-82	31-44	0-28	NP-7
	6-14	Fine sandy loam, sandy loam, loam	SM, SC-SM	A-4, A-2	0	0	100	95-100	68-83	30-43	0-28	NP-7
	14-80	Sandy clay, clay, clay loam	CL, CH	A-7, A-6	0	0	100	100	85-100	56-91	38-81	16-54
Ochlockonee----	0-6	Loamy sand	SM	A-2-4	0	0	100	95-100	73-87	21-32	0-30	NP-7
	6-45	Loamy fine sand, fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	88-100	26-38	0-32	NP-9
	45-80	Stratified sandy loam to loamy sand, sandy loam, loamy sand	SM, SC-SM	A-4, A-2-4	0	0	100	95-100	88-100	25-40	0-32	NP-9

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
67: Goldhead-----	0-6	Sand	SP-SM	A-3	0	0	100	100	76-80	9-13	0-14	NP
	6-32	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	95-100	85-100	65-80	8-14	0-14	NP
	32-56	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, SM	A-6, A-2-6, A-2-4	0	0-2	85-100	70-100	52-96	21-51	20-40	NP-25
	56-80	Sand, fine sand	SP-SM	A-3	0	0	95-100	85-100	64-79	8-12	0-14	NP
68: Goldhead, depressional---	0-6	Sand	SP-SM	A-3	0	0	100	100	76-80	9-13	0-14	NP
	6-32	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	95-100	85-100	65-80	8-14	0-14	NP
	32-56	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, SM	A-6, A-2-6, A-2-4	0	0-2	85-100	70-100	52-96	21-51	20-40	NP-25
	56-80	Sand, fine sand	SP-SM	A-3	0	0	95-100	85-100	64-79	8-12	0-14	NP
Meadowbrook, depressional---	0-6	Sand	SP-SM	A-3	0	0	100	95-100	72-78	9-12	0-14	NP
	6-46	Sand, fine sand	SP-SM	A-3	0	0	100	95-100	71-80	7-12	0-14	NP
	46-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2-6, A-2-4	0	0	100	95-100	65-79	23-36	0-35	NP-20
69: Troup-----	0-5	Sand	SP-SM, SM	A-2, A-3	0	0	95-100	85-100	63-83	8-18	0-14	NP
	5-60	Sand, loamy sand	SP-SM, SM	A-2, A-3	0	0	95-100	85-100	64-84	9-19	0-14	NP
	60-80	Sandy loam, fine sandy loam, sandy clay loam	SC-SM, SC	A-2, A-4, A-6	0	0	95-100	85-100	61-91	25-49	19-40	4-20
70: Troup-----	0-5	Sand	SP-SM, SM	A-3, A-2	0	0	95-100	85-100	63-83	8-18	0-14	NP
	5-60	Sand, loamy sand	SP-SM, SM	A-2, A-3	0	0	95-100	85-100	64-84	9-19	0-14	NP
	60-80	Sandy loam, fine sandy loam, sandy clay loam	SC-SM, SC	A-2, A-4, A-6	0	0	95-100	85-100	61-91	25-49	19-40	4-20
71: Pits.												
72: Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
73: Foxworth-----	0-9	Sand	SP-SM	A-2-4, A-3	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
Hosford-----	0-66	Mucky coarse sand	SP-SM, SM	A-3, A-2	0	0	95-100	89-100	68-82	10-17	0-14	NP
	66-80	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	95-100	90-100	69-82	8-15	0-20	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
73: Lucy-----	0-8	Sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	8-18	0-14	NP
	8-26	Sand, loamy sand, fine sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	7-17	0-14	NP
	26-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-6, A-2, A-4	0	0	97-100	91-100	61-87	20-42	10-30	NP-15
74: Garcon-----	0-8	Fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	93-98	10-21	0-14	NP
	8-22	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	94-99	10-20	0-14	NP
	22-44	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM	A-2-4	0	0	100	100	88-96	33-41	0-25	NP-7
	44-80	Fine sand, sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	94-99	10-20	0-14	NP
Ochlockonee----	0-6	Loamy sand	SM	A-2-4	0	0	100	95-100	73-87	21-32	0-30	NP-7
	6-45	Loamy fine sand, fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	88-100	26-38	0-32	NP-9
	45-80	Stratified sandy loam to loamy sand, sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0	0	100	95-100	88-100	25-40	0-32	NP-9
Ousley-----	0-7	Sand	SP-SM	A-3	0	0	100	100	76-78	8-12	0-14	NP
	7-25	Fine sand, coarse sand	SP-SM	A-3	0	0	100	95-100	73-78	8-10	0-14	NP
	25-80	Sand, fine sand, coarse sand	SP-SM	A-3	0	0	100	95-100	73-78	8-10	0-14	NP
75: Brantley-----	0-6	Fine sandy loam	SM, SC-SM	A-4	0	0	95-100	90-100	77-99	27-43	0-30	NP-7
	6-11	Fine sandy loam, loam	SM, SC-SM	A-4	0	0	95-100	90-100	78-100	26-42	0-30	NP-7
	11-35	Clay, clay loam, sandy clay	CL, ML	A-7	0	0	95-100	90-100	75-100	55-82	41-50	16-22
	35-43	Clay loam, sandy clay loam	CL, SC	A-6, A-4	0	0	95-100	90-100	73-92	48-67	30-40	7-15
	43-80	Sandy loam, fine sandy loam, sandy clay loam, loamy fine sand	SM, SC	A-4, A-2	0	0	95-100	90-100	62-84	27-45	0-38	NP-9
Okeelala-----	0-7	Sandy loam	SM	A-2	0	0-5	98-100	84-100	58-77	24-37	0-14	NP
	7-16	Sandy loam, fine sandy loam, loamy sand	SM	A-2	0	0-5	98-100	84-100	59-79	23-36	0-14	NP
	16-52	Sandy clay loam, clay loam, loam	SC, CL	A-4, A-2-6, A-6	0	0	98-100	85-100	65-94	31-54	23-38	7-16
	52-80	Sandy loam, fine sandy loam, loamy sand, sand	SM	A-2-4	0	0	98-100	85-100	54-79	16-35	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
75: Lucy-----	0-8	Sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	8-18	0-14	NP
	8-26	Sand, loamy sand, fine sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	7-17	0-14	NP
	26-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-6, A-2, A-4	0	0	97-100	91-100	61-87	20-42	10-30	NP-15
78: Lucy-----	0-8	Sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	8-18	0-14	NP
	8-26	Sand, loamy sand, fine sand	SM, SP-SM	A-2	0	0	95-100	85-100	63-83	7-17	0-14	NP
	26-80	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-4, A-6	0	0	97-100	91-100	61-87	20-42	10-30	NP-15
Blanton-----	0-8	Sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	8-15	0-14	NP
	8-59	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	7-14	0-14	NP
	59-73	Loamy sand, loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0	0	100	95-100	76-88	22-31	0-25	NP-3
	73-80	Fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4, A-2-6, A-6	0	0	100	95-100	83-100	27-51	12-45	3-22
Cowarts-----	0-8	Fine sandy loam	SM, SC-SM	A-4, A-2	0	0	95-100	85-100	71-97	23-40	0-20	NP-5
	8-12	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2, A-6	0	0	95-100	84-100	71-100	26-51	20-40	NP-15
	12-25	Sandy clay loam, sandy clay, clay loam	SC-SM, SC, SM	A-6, A-7	0	0	95-100	84-100	73-100	35-57	20-54	5-25
	25-80	Sandy clay loam, sandy loam	SC-SM, SC	A-4, A-2, A-6	0	0	87-100	71-100	49-87	23-50	25-53	5-20
81: Scranton-----	0-9	Fine sand	SM, SP-SM	A-3, A-2	0	0	100	95-100	87-98	10-21	0-14	NP
	9-18	Fine sand, sand	SM, SP-SM	A-3, A-2	0	0	100	95-100	88-99	10-20	0-14	NP
	18-80	Fine sand, sand	SP-SM, SM	A-2, A-3	0	0	100	95-100	71-81	10-17	0-14	NP
82: Brickyard-----	0-4	Clay loam	MH, CL, CH	A-7	0	0	100	98-100	81-100	64-98	41-70	15-40
	4-50	Clay, silty clay, silty clay loam	CH, CL, MH	A-7	0	0	100	98-100	78-100	66-92	41-75	15-45
	50-80	Clay, silty clay, silty clay loam	CH, CL, MH, OH	A-7, A-6	0	0	100	98-100	77-100	60-94	30-70	11-40
Chowan-----	0-5	Silty clay loam	CL, MH, ML	A-7, A-6, A-4	0	0	100	100	86-100	76-93	22-62	6-30
	5-35	Silty clay loam, silt loam, loam	CL, MH, ML	A-7, A-6, A-4	0	0	100	100	86-100	76-93	22-62	6-30
	35-80	Muck	PT	A-8	0	0	---	---	---	---	---	---

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
83: Plummer-----	0-10	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	75-81	10-17	0-14	NP
	10-55	Sand, loamy sand, fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-16	0-14	NP
	55-64	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	97-100	76-93	29-45	0-30	NP-10
	64-80	Sandy clay loam, fine sandy loam, sandy loam	SC, SC-SM, SM	A-6, A-4, A-2-4	0	0	100	97-100	74-91	28-44	0-40	NP-12
Sapelo-----	0-5	Sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	10-13	0-14	NP
	5-12	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	76-79	9-13	0-14	NP
	12-17	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-2	0	0	100	100	76-80	10-15	0-14	NP
	17-51	Sand, fine sand	SP-SM, SM	A-3, A-2	0	0	100	100	77-80	10-13	0-14	NP
	51-80	Sandy loam, sandy clay loam, fine sandy loam	SM, SC-SM, SC	A-2-4, A-4, A-6	0	0	100	100	65-85	22-42	0-40	NP-20
Pottsburg-----	0-8	Sand	SP-SM	A-3	0	0	100	100	77-80	9-12	0-14	NP
	8-57	Sand, fine sand	SP-SM, SM	A-3	0	0	100	100	76-80	9-13	0-14	NP
	57-80	Sand, fine sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	0	100	100	75-80	7-13	0-14	NP
91: Woodington-----	0-3	Loamy sand	SM	A-2-4	0	0	100	95-100	71-84	20-30	10-20	NP
	3-13	Fine sandy loam, sandy loam	SM	A-2, A-4	0	0	100	95-100	62-78	23-37	15-25	NP-3
	13-80	Fine sandy loam, loamy fine sand, loamy sand	SM	A-4, A-2	0	0	100	95-100	79-98	23-40	10-25	NP-3
92: Pamlico, frequently flooded-----	0-45	Muck	PT	A-8	0	0	---	---	---	---	---	---
	45-80	Sand, fine sand, loamy sand	SM, SP-SM	A-3, A-2	0	0	100	100	78-83	10-19	0-14	NP
Pickney, frequently flooded-----	0-27	Mucky fine sand	SM	A-2	0	0	100	100	92-100	12-23	0-14	NP
	27-80	Fine sand, loamy sand, loamy fine sand	SM, SP-SM	A-3, A-2	0	0	100	100	91-100	10-21	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
95: Bibb-----	0-5	Fine sandy loam	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	24-44	0-25	NP-7
	5-15	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-4, A-2	0	0-4	95-100	86-100	70-98	25-45	0-25	NP-7
	15-45	Sandy loam, loam, silt loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	23-83	9-43	0-30	NP-7
	45-80	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0	0-7	70-100	34-100	25-90	7-36	0-30	NP-7
Rains-----	0-4	Sandy loam	SM, SC	A-2-4, A-4	0	0	95-100	86-100	60-81	28-44	0-30	NP-10
	4-13	Sandy loam	SM, SC	A-2-4, A-4	0	0	95-100	86-100	61-82	29-45	0-30	NP-10
	13-65	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, CL-ML, CL	A-6, A-4, A-2	0	0	100	95-100	73-94	35-56	18-40	4-20
	65-80	Sandy clay, clay loam, sandy clay loam	CL, CL-ML, CL SC, SC-SM	A-7, A-6, A-4	0	0	100	98-100	66-89	33-56	18-45	4-28
Garcon-----	0-8	Fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	93-98	10-21	0-14	NP
	8-22	Fine sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	94-99	10-20	0-14	NP
	22-44	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM	A-2-4	0	0	100	100	88-96	33-41	0-25	NP-7
	44-80	Fine sand, sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	94-99	10-20	0-14	NP
96: Foxworth-----	0-9	Sand	SP-SM	A-3, A-2-4	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
97: Foxworth-----	0-9	Sand	SP-SM	A-2-4, A-3	0	0	100	100	74-81	8-15	0-14	NP
	9-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	100	100	75-82	8-15	0-14	NP
Lakeland-----	0-5	Sand	SP-SM	A-3, A-2-4	0	0	90-100	81-100	62-83	8-16	0-14	NP
	5-80	Sand, fine sand	SP-SM	A-3, A-2-4	0	0	91-100	81-100	62-81	7-14	0-14	NP
98: Leon, nonhydic-	0-4	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	9-13	0-14	NP
	4-18	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	6-9	0-14	NP
	18-27	Sand, fine sand, loamy sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	76-82	10-17	0-14	NP
	27-80	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	7-10	0-14	NP
Chipley-----	0-6	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	8-12	0-14	NP
	6-80	Sand, fine sand	SP-SM	A-2-4, A-3	0	0	100	100	75-81	8-14	0-14	NP

Table 15.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	<i>In</i>				<i>Pct</i>	<i>Pct</i>					<i>Pct</i>	
98: Leon, hydric----	0-4	Sand	SP-SM	A-3, A-2-4	0	0	100	100	75-79	9-13	0-14	NP
	4-18	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	6-9	0-14	NP
	18-27	Sand, fine sand, loamy sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	76-82	10-17	0-14	NP
	27-80	Sand, fine sand	SP-SM	A-3	0	0	100	100	75-78	7-10	0-14	NP
99: Water.												
101: Albany-----	0-6	Sand	SM	A-2	0	0	100	100	86-95	17-26	0-14	NP
	6-47	Sand	SM	A-2	0	0	100	100	87-96	16-25	0-14	NP
	47-80	Fine sandy loam, sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2, A-6	0	0	97-100	92-100	72-100	22-46	0-40	NP-17
Blanton-----	0-8	Sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	8-15	0-14	NP
	8-59	Sand, fine sand	SP-SM, SM	A-3, A-2-4	0	0	100	90-100	67-81	7-14	0-14	NP
	59-73	Loamy sand, loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0	0	100	95-100	76-88	22-31	0-25	NP-3
	73-80	Fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4, A-2-6, A-6	0	0	100	95-100	83-100	27-51	12-45	3-22

Table 16.--Physical Soil Properties

[Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated]

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
2: Albany-----	0-6	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	1.0-2.0	.10	.10	5	1	180
	6-47	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	0.1-0.5	.10	.10			
	47-80	0-50	13-35	1.55-1.65	0.2-2	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
4: Alpin-----	0-10	0-15	1-8	1.35-1.55	2-6	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	10-45	0-15	1-7	1.40-1.55	6-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.10			
	45-80	0-15	5-8	1.45-1.65	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.10			
Foxworth-----	0-9	0-15	1-8	1.25-1.45	6-20	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	9-80	0-15	1-8	1.40-1.55	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
5: Rains-----	0-4	0-50	7-18	1.30-1.60	2-6	0.08-0.12	0.0-2.9	1.0-6.0	.24	.24	5	3	86
	4-13	0-50	7-18	1.30-1.60	2-6	0.08-0.12	0.0-2.9	0.5-2.0	.24	.24			
	13-65	0-28	18-35	1.30-1.60	0.6-2	0.11-0.15	0.0-2.9	0.5-1.0	.24	.24			
	65-80	0-20	18-40	1.30-1.50	0.6-2	0.10-0.15	0.0-2.9	0.5-1.0	.28	.28			
Bladen-----	0-5	0-50	10-20	1.35-1.45	0.6-2	0.10-0.13	0.0-2.9	2.0-8.0	.24	.24	5	3	86
	5-14	0-50	10-20	1.35-1.45	0.6-2	0.10-0.13	0.0-2.9	0.5-2.0	.24	.24			
	14-40	0-40	35-55	1.60-1.70	0.06-0.2	0.12-0.16	3.0-5.9	0.2-0.8	.37	.37			
	40-80	0-40	35-70	1.60-1.70	0.06-0.2	0.12-0.16	3.0-5.9	0.1-0.5	.37	.37			
6: Blanton-----	0-8	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-59	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	59-73	0-30	10-18	1.50-1.65	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.15	.15			
	73-80	0-50	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
7: Blanton-----	0-8	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-59	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	59-73	0-30	10-18	1.50-1.65	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.15	.15			
	73-80	0-50	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
8: Brickyard-----	0-4	14-53	28-60	1.30-1.60	0.06-0.2	0.14-0.18	6.0-8.9	3.0-8.0	.28	.28	5	4	86
	4-50	0-40	35-60	1.30-1.60	0.00-0.06	0.14-0.18	3.0-5.9	0.5-1.0	.37	.37			
	50-80	0-40	28-60	0.95-1.60	0.06-0.2	0.12-0.18	3.0-5.9	0.2-0.8	.32	.32			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
9: Centenary-----	0-5	0-15	1-8	1.40-1.60	6-20	0.03-0.08	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-68	0-15	1-8	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.10	.10			
	68-80	0-15	2-10	1.50-1.70	2-6	0.03-0.10	0.0-2.9	0.5-2.0	.10	.10			
11: Chipley-----	0-6	0-15	1-5	1.35-1.45	6-20	0.05-0.10	0.0-2.9	2.0-5.0	.10	.10	5	1	180
	6-80	0-15	1-7	1.45-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
Foxworth-----	0-9	0-15	1-8	1.25-1.45	6-20	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	9-80	0-15	1-8	1.40-1.55	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
12: Rutlege-----	0-12	0-15	2-10	1.30-1.50	6-20	0.04-0.06	0.0-2.9	3.0-9.0	.10	.10	5	8	0
	12-80	0-15	2-10	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.5-3.0	.15	.15			
Plummer-----	0-10	0-15	1-7	1.35-1.65	6-20	0.03-0.08	0.0-2.9	1.0-10	.10	.10	5	8	0
	10-55	0-15	1-7	1.35-1.65	2-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	55-64	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.15	.15			
	64-80	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.20	.20			
13: Dorovan-----	0-53	0-0	0-0	0.25-0.40	0.6-2	0.20-0.25	---	20-80	---	---	3	8	0
	53-80	0-0	0-0	0.35-0.55	0.6-2	0.20-0.25	---	20-80	---	---			
Pamlico-----	0-45	0-0	0-0	0.20-0.65	0.6-6	0.24-0.40	---	20-80	---	---	2	8	0
	45-80	0-15	5-10	1.60-1.75	6-20	0.02-0.10	0.0-2.9	0.5-3.0	.10	.10			
14: Dothan-----	0-6	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-1.0	.15	.15	5	2	134
	6-12	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-0.5	.15	.15			
	12-35	0-28	18-35	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.28	.28			
	35-80	14-53	18-40	1.45-1.70	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.2	.28	.28			
15: Dothan-----	0-6	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-1.0	.15	.15	5	2	134
	6-12	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-0.5	.15	.15			
	12-35	0-28	18-35	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.28	.28			
	35-80	14-53	18-40	1.45-1.70	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.2	.28	.28			
17: Dothan-----	0-6	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-1.0	.15	.15	5	2	134
	6-12	0-30	5-15	1.30-1.60	2-6	0.06-0.10	0.0-2.9	0.1-0.5	.15	.15			
	12-35	0-28	18-35	1.40-1.60	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.28	.28			
	35-80	14-53	18-40	1.45-1.70	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.2	.28	.28			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
17: Fuquay-----	0-6	0-30	2-10	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-2.0	.15	.15	5	2	134
	6-26	0-15	2-10	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.1-0.5	.15	.15			
	26-50	0-50	10-35	1.40-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.4	.20	.20			
	50-80	0-28	10-35	1.40-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.2	.20	.20			
24: Goldsboro-----	0-4	0-30	2-8	1.55-1.75	6-20	0.06-0.11	0.0-2.9	1.0-3.0	.17	.17	5	2	134
	4-14	0-30	2-8	1.55-1.75	6-20	0.06-0.11	0.0-2.9	0.2-0.8	.17	.17			
	14-80	0-28	18-30	1.30-1.50	0.6-2	0.11-0.15	0.0-2.9	0.0-0.2	.24	.24			
25: Goldsboro-----	0-4	0-30	2-8	1.55-1.75	6-20	0.06-0.11	0.0-2.9	1.0-3.0	.17	.17	5	2	134
	4-14	0-30	2-8	1.55-1.75	6-20	0.06-0.11	0.0-2.9	0.1-0.5	.17	.17			
	14-80	0-28	18-34	1.30-1.50	0.6-2	0.11-0.15	0.0-2.9	0.0-0.2	.24	.24			
26: Foxworth-----	0-9	0-15	1-8	1.25-1.45	6-20	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	9-80	0-15	1-8	1.40-1.55	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
27: Fuquay-----	0-6	0-30	2-10	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.5-2.0	.15	.15	5	2	134
	6-26	0-15	2-10	1.60-1.70	6-20	0.04-0.09	0.0-2.9	0.1-0.5	.15	.15			
	26-50	0-50	10-35	1.40-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.4	.20	.20			
	50-80	0-28	10-35	1.40-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.2	.20	.20			
30: Elloree-----	0-5	0-30	2-8	1.40-1.60	6-20	0.06-0.11	0.0-2.9	2.0-8.0	.15	.15	5	2	134
	5-29	0-15	1-6	1.50-1.70	6-20	0.02-0.10	0.0-2.9	0.5-2.0	.10	.10			
	29-45	0-50	9-25	1.30-1.60	2-6	0.10-0.15	0.0-2.9	0.5-2.0	.17	.17			
	45-57	0-30	5-18	1.30-1.50	2-6	0.10-0.17	0.0-2.9	0.5-1.0	.15	.15			
	57-80	0-15	5-25	1.30-1.50	2-6	0.10-0.17	0.0-2.9	0.2-0.8	.10	.10			
Bibb-----	0-5	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	5-15	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	0.5-2.0	.20	.20			
	15-45	0-55	2-18	1.45-1.75	0.6-2	0.10-0.20	0.0-2.9	0.5-1.0	.20	.20			
	45-80	0-30	2-18	1.45-1.75	2-6	0.10-0.20	0.0-2.9	0.5-1.0	.17	.17			
Meggett-----	0-4	0-50	5-20	1.20-1.40	2-6	0.10-0.15	0.0-2.9	2.0-8.0	.24	.24	5	3	86
	4-13	0-50	5-20	1.20-1.40	2-6	0.10-0.15	0.0-2.9	0.5-2.0	.24	.24			
	13-21	0-20	30-60	1.45-1.60	0.06-0.2	0.13-0.18	6.0-8.9	0.2-1.0	.32	.32			
	21-72	0-40	35-60	1.50-1.75	0.06-0.2	0.13-0.18	6.0-8.9	0.2-1.0	.32	.32			
	72-80	0-20	25-50	1.40-1.60	0.06-0.6	0.12-0.18	3.0-5.9	0.2-1.0	.28	.28			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
31: Hurricane-----	0-8	0-15	1-4	1.40-1.60	6-20	0.03-0.07	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	8-64	0-15	1-4	1.40-1.60	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
	64-80	0-15	2-8	1.55-1.65	2-6	0.10-0.15	0.0-2.9	0.5-3.0	.15	.15			
Chipley-----	0-6	0-15	1-5	1.35-1.45	6-20	0.05-0.10	0.0-2.9	2.0-5.0	.10	.10	5	1	180
	6-80	0-15	1-7	1.45-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
32: Plummer-----	0-10	0-15	1-7	1.35-1.65	6-20	0.03-0.08	0.0-2.9	1.0-10	.10	.10	5	8	0
	10-55	0-15	1-7	1.35-1.65	2-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	55-64	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.15	.15			
	64-80	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.20	.20			
Pelham-----	0-7	0-30	3-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	1.0-2.0	.10	.10	5	8	0
	7-37	0-30	1-8	1.50-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.10	.10			
	37-48	0-50	15-30	1.30-1.60	0.6-2	0.10-0.13	0.0-2.9	0.1-0.5	.24	.24			
	48-80	0-28	15-40	1.30-1.60	0.2-2	0.10-0.16	0.0-2.9	0.0-0.4	.24	.24			
34: Lakeland-----	0-5	0-15	2-8	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	0-15	1-6	1.50-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.10			
35: Lakeland-----	0-5	0-15	2-8	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	0-15	1-6	1.50-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.10			
36: Lakeland-----	0-5	0-15	2-8	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	0-15	1-6	1.50-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.10			
37: Lakeland-----	0-5	0-15	2-8	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	0-15	1-6	1.50-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.10			
Foxworth-----	0-9	0-15	1-8	1.25-1.45	6-20	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	9-80	0-15	1-8	1.40-1.55	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
38: Leeffield-----	0-3	0-30	3-10	1.45-1.60	6-20	0.04-0.07	0.0-2.9	1.0-2.0	.10	.10	5	2	134
	3-21	0-15	3-10	1.45-1.60	6-20	0.04-0.07	0.0-2.9	1.0-2.0	.10	.10			
	21-33	0-50	15-25	1.50-1.65	0.6-2	0.10-0.13	0.0-2.9	0.1-0.5	.15	.15			
	33-80	0-28	15-30	1.50-1.70	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.3	.20	.20			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
39: Leon, nonhydic-----	0-4	0-15	1-5	1.30-1.45	6-20	0.05-0.15	0.0-2.9	0.5-4.0	.10	.10	5	1	180
	4-18	0-15	0-3	1.40-1.60	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.10			
	18-27	0-15	2-8	1.25-1.65	0.6-6	0.15-0.30	0.0-2.9	2.0-4.0	.15	.15			
	27-80	0-15	1-4	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
Leon, hydric-----	0-4	0-15	1-5	1.30-1.45	6-20	0.05-0.15	0.0-2.9	0.5-4.0	.10	.10	5	1	180
	4-18	0-15	0-3	1.40-1.60	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.10			
	18-27	0-15	2-8	1.25-1.65	0.6-6	0.15-0.30	0.0-2.9	2.0-4.0	.15	.15			
	27-80	0-15	1-4	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
42: Lucy-----	0-8	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	8-26	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	26-80	0-50	10-30	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.1-0.5	.24	.24			
44: Lynchburg-----	0-5	0-30	2-10	1.40-1.70	6-20	0.07-0.10	0.0-2.9	0.5-5.0	.15	.15	5	2	134
	5-14	0-50	5-18	1.30-1.60	2-6	0.09-0.13	0.0-2.9	0.5-5.0	.10	.10			
	14-48	0-28	18-35	1.30-1.50	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.20	.20			
	48-80	14-53	27-50	1.30-1.45	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.20	.20			
45: Lynn Haven-----	0-3	0-15	1-5	1.35-1.60	6-20	0.05-0.12	0.0-2.9	1.0-4.0	.10	.10	5	1	180
	3-29	0-15	0-3	1.35-1.60	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
	29-35	0-15	2-8	1.40-1.55	0.6-6	0.15-0.30	0.0-2.9	1.0-4.0	.15	.15			
	35-80	0-15	1-4	1.50-1.65	2-20	0.01-0.05	0.0-2.9	0.0-0.5	.10	.10			
46: Hurricane-----	0-8	0-15	1-4	1.40-1.60	6-20	0.03-0.07	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	8-64	0-15	1-4	1.40-1.60	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
	64-80	0-15	2-8	1.55-1.65	2-6	0.10-0.15	0.0-2.9	0.5-3.0	.15	.15			
Leon-----	0-4	0-15	1-5	1.30-1.45	6-20	0.05-0.15	0.0-2.9	0.5-4.0	.10	.10	5	1	180
	4-18	0-15	0-3	1.40-1.60	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.10			
	18-27	0-15	2-8	1.25-1.65	0.6-6	0.15-0.30	0.0-2.9	2.0-4.0	.15	.15			
	27-80	0-15	1-4	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
Albany-----	0-6	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	1.0-2.0	.10	.10	5	1	180
	6-47	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	0.1-0.5	.10	.10			
	47-80	0-50	13-35	1.55-1.65	0.2-2	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
47: Torhunta-----	0-13	0-50	7-18	1.35-1.65	2-6	0.10-0.15	0.0-2.9	3.0-10	.20	.20	5	8	0
	13-35	0-50	5-18	1.35-1.60	2-6	0.10-0.15	0.0-2.9	0.5-2.0	.20	.20			
	35-80	0-15	2-18	1.45-1.65	6-20	0.00-0.05	0.0-2.9	0.5-1.0	.10	.10			
Lynn Haven-----	0-3	0-15	1-5	1.35-1.60	6-20	0.05-0.12	0.0-2.9	1.0-4.0	.10	.10	5	1	180
	3-29	0-15	0-3	1.35-1.60	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
	29-35	0-15	2-8	1.40-1.55	0.6-6	0.15-0.30	0.0-2.9	1.0-4.0	.15	.15			
	35-80	0-15	1-4	1.50-1.65	2-20	0.01-0.05	0.0-2.9	0.0-0.5	.10	.10			
Croatan-----	0-48	0-0	0-0	0.40-0.65	0.06-6	0.35-0.45	---	25-60	---	---	2	8	0
	48-62	0-50	8-20	1.40-1.60	0.2-6	0.10-0.15	0.0-2.9	2.0-15	.17	.17			
	62-80	0-20	10-40	1.40-1.60	0.2-2	0.12-0.20	0.0-2.9	0.2-1.0	.24	.24			
48: Meadowbrook, nonhydic-----	0-6	0-15	0-3	1.35-1.65	6-20	0.05-0.10	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	6-46	0-15	1-6	1.35-1.65	6-20	0.03-0.08	0.0-2.9	0.2-0.8	.10	.10			
	46-80	0-50	11-22	1.50-1.80	0.2-2	0.10-0.15	0.0-2.9	0.1-0.5	.15	.15			
Meadowbrook, hydric-	0-6	0-15	0-3	1.35-1.65	6-20	0.05-0.10	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	6-46	0-15	1-6	1.35-1.65	6-20	0.03-0.08	0.0-2.9	0.2-0.8	.10	.10			
	46-80	0-50	11-22	1.50-1.80	0.2-2	0.10-0.15	0.0-2.9	0.1-0.5	.15	.15			
49: Meadowbrook, slough-	0-6	0-15	0-3	1.35-1.65	6-20	0.05-0.10	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	6-46	0-15	1-6	1.35-1.65	6-20	0.03-0.08	0.0-2.9	0.2-0.8	.10	.10			
	46-80	0-50	11-22	1.50-1.80	0.2-2	0.10-0.15	0.0-2.9	0.1-0.5	.15	.15			
54: Pelham, nonhydic---	0-7	0-30	3-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	1.0-2.0	.10	.10	5	2	134
	7-37	0-30	1-8	1.50-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.10	.10			
	37-48	0-50	15-30	1.30-1.60	0.6-2	0.10-0.13	0.0-2.9	0.1-0.5	.24	.24			
	48-80	0-28	15-40	1.30-1.60	0.2-2	0.10-0.16	0.0-2.9	0.0-0.4	.24	.24			
Pelham, hydric-----	0-7	0-30	3-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	1.0-2.0	.10	.10	5	2	134
	7-37	0-30	1-8	1.50-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.10	.10			
	37-48	0-50	15-30	1.30-1.60	0.6-2	0.10-0.13	0.0-2.9	0.1-0.5	.24	.24			
	48-80	0-28	15-40	1.30-1.60	0.2-2	0.10-0.16	0.0-2.9	0.0-0.4	.24	.24			
55: Plummer, nonhydic--	0-10	0-15	1-7	1.35-1.65	6-20	0.03-0.08	0.0-2.9	1.0-10	.10	.10	5	1	180
	10-55	0-15	1-7	1.35-1.65	2-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	55-64	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.15	.15			
	64-80	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.20	.20			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
55: Plummer, hydric-----	0-10	0-15	1-7	1.35-1.65	6-20	0.03-0.08	0.0-2.9	1.0-10	.10	.10	5	1	180
	10-55	0-15	1-7	1.35-1.65	2-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	55-64	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.15	.15			
	64-80	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.20	.20			
56: Pottsburg, nonhydric-----	0-8	0-15	1-4	1.20-1.45	6-20	0.05-0.15	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-57	0-15	0-4	1.40-1.70	6-20	0.03-0.10	0.0-2.9	0.0-0.5	.10	.10			
	57-80	0-15	1-6	1.55-1.70	0.6-2	0.10-0.25	0.0-2.9	1.0-4.0	.15	.15			
Pottsburg, hydric---	0-8	0-15	1-4	1.20-1.45	6-20	0.05-0.15	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-57	0-15	0-4	1.40-1.70	6-20	0.03-0.10	0.0-2.9	0.0-0.5	.10	.10			
	57-80	0-15	1-6	1.55-1.70	0.6-2	0.10-0.25	0.0-2.9	1.0-4.0	.15	.15			
57: Surrency, depressional-----	0-13	0-30	2-10	1.50-1.70	2-20	0.05-0.10	0.0-2.9	2.0-12	.10	.10	5	8	0
	13-27	0-15	2-10	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10			
	27-44	0-28	10-23	1.60-1.85	0.6-6	0.06-0.10	0.0-2.9	0.2-0.8	.15	.15			
	44-80	0-50	10-23	1.60-1.85	0.6-6	0.06-0.10	0.0-2.9	0.1-0.5	.15	.15			
Pantego, depressional-----	0-16	0-50	5-15	1.40-1.60	2-6	0.12-0.20	0.0-2.9	4.0-10	.20	.20	5	8	0
	16-80	0-28	18-35	1.30-1.50	0.6-2	0.12-0.20	0.0-2.9	0.5-2.0	.28	.28			
Croatan, depressional-----	0-48	---	0-0	0.40-0.65	0.06-6	0.35-0.45	---	25-60	---	---	2	8	0
	48-62	0-50	8-20	1.40-1.60	0.2-6	0.10-0.15	0.0-2.9	2.0-15	.17	.17			
	62-80	0-20	10-40	1.40-1.60	0.2-2	0.12-0.20	0.0-2.9	0.2-1.0	.24	.24			
58: Rutlege-----	0-12	0-15	2-10	1.30-1.50	6-20	0.04-0.06	0.0-2.9	3.0-9.0	.10	.10	5	8	0
	12-80	0-15	2-10	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.5-3.0	.15	.15			
Bibb-----	0-5	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	5-15	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	0.5-2.0	.20	.20			
	15-45	0-55	2-18	1.45-1.75	0.6-2	0.10-0.20	0.0-2.9	0.5-1.0	.20	.20			
	45-80	0-30	2-18	1.45-1.75	2-6	0.10-0.20	0.0-2.9	0.5-1.0	.17	.17			
Surrency-----	0-13	0-30	2-10	1.50-1.70	2-20	0.05-0.10	0.0-2.9	2.0-12	.10	.10	5	8	0
	13-27	0-15	2-10	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10			
	27-44	0-28	10-23	1.60-1.85	0.6-6	0.06-0.10	0.0-2.9	0.2-0.8	.15	.15			
	44-80	0-50	10-23	1.60-1.85	0.6-6	0.06-0.10	0.0-2.9	0.1-0.5	.15	.15			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
59: Hosford-----	0-66	0-15	2-8	1.30-1.50	6-20	0.05-0.10	0.0-2.9	5.0-15	.10	.10	5	8	0
	66-80	0-15	2-8	1.50-1.70	6-20	0.04-0.08	0.0-2.9	0.5-3.0	.17	.17			
60: Sapelo, nonhydic---	0-5	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	5-12	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	12-17	0-15	3-7	1.35-1.60	0.6-2	0.10-0.15	0.0-2.9	2.0-4.0	.15	.15			
	17-51	0-15	3-6	1.50-1.70	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.17	.17			
	51-80	0-50	10-30	1.55-1.75	0.2-2	0.12-0.17	0.0-2.9	0.0-0.2	.24	.24			
Sapelo, hydric-----	0-5	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	5-12	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	12-17	0-15	3-7	1.35-1.60	0.6-2	0.10-0.15	0.0-2.9	2.0-4.0	.15	.15			
	17-51	0-15	3-6	1.50-1.70	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.17	.17			
	51-80	0-50	10-30	1.55-1.75	0.2-2	0.12-0.17	0.0-2.9	0.0-0.2	.24	.24			
61: Osier-----	0-7	0-15	1-8	1.35-1.60	6-20	0.03-0.10	0.0-2.9	2.0-5.0	.10	.10	5	2	180
	7-36	0-15	1-8	1.40-1.60	6-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	36-80	0-15	2-5	1.40-1.60	20-20	0.02-0.05	0.0-2.9	0.0-0.5	.05	.05			
62: Scranton, slough----	0-9	0-30	5-12	1.30-1.60	6-20	0.07-0.11	0.0-2.9	1.0-4.0	.15	.15	5	2	134
	9-18	0-30	3-12	1.40-1.60	6-20	0.05-0.11	0.0-2.9	0.1-0.5	.10	.10			
	18-80	0-17	2-8	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.0-0.3	.10	.10			
63: Stilson-----	0-6	0-15	3-8	1.35-1.60	6-20	0.06-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	220
	6-26	0-15	3-8	1.35-1.60	6-20	0.06-0.09	0.0-2.9	0.0-0.2	.10	.10			
	26-30	0-50	15-30	1.40-1.60	0.6-2	0.09-0.12	0.0-2.9	0.1-0.2	.24	.24			
	30-80	0-28	15-36	1.40-1.60	0.6-2	0.08-0.10	0.0-2.9	0.0-0.2	.17	.17			
65: Pickney-----	0-27	0-15	2-10	1.20-1.40	6-20	0.04-0.08	0.0-2.9	5.0-15	.10	.10	5	8	0
	27-80	0-15	1-10	1.40-1.60	6-20	0.03-0.11	0.0-2.9	2.0-6.0	.10	.10			
Bibb-----	0-5	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	5-15	0-50	2-18	1.50-1.70	0.6-2	0.12-0.18	0.0-2.9	0.5-2.0	.20	.20			
	15-45	0-55	2-18	1.45-1.75	0.6-2	0.10-0.20	0.0-2.9	0.5-1.0	.20	.20			
	45-80	0-30	2-18	1.45-1.75	2-6	0.10-0.20	0.0-2.9	0.5-1.0	.17	.17			
Dorovan-----	0-53	---	0-0	0.25-0.40	0.6-2	0.20-0.25	---	20-80	---	---	3	8	0
	53-80	---	0-0	0.35-0.55	0.6-2	0.20-0.25	---	20-80	---	---			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
66: Wahee-----	0-6	0-50	7-18	1.30-1.60	0.6-2	0.10-0.15	0.0-2.9	1.0-5.0	.24	.24	5	3	86
	6-14	0-50	7-18	1.30-1.60	0.6-2	0.10-0.15	0.0-2.9	0.2-1.0	.24	.24			
	14-80	0-20	35-70	1.40-1.60	0.06-0.2	0.12-0.20	3.0-5.9	0.1-0.5	.28	.28			
Ochlockonee-----	0-6	0-30	5-15	1.40-1.60	6-20	0.08-0.12	0.0-2.9	0.5-2.0	.15	.15	5	2	134
	6-45	0-30	8-18	1.40-1.60	0.6-2	0.10-0.20	0.0-2.9	0.1-0.5	.20	.20			
	45-80	0-50	6-18	1.40-1.70	2-6	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
67: Goldhead-----	0-6	0-15	1-5	1.30-1.50	6-20	0.05-0.15	0.0-2.9	2.0-4.0	.10	.10	5	1	180
	6-32	0-15	1-5	1.35-1.50	6-20	0.02-0.05	0.0-2.9	0.0-0.4	.10	.10			
	32-56	0-28	13-34	1.45-1.65	0.6-2	0.10-0.20	0.0-2.9	0.1-0.5	.24	.24			
	56-80	0-15	1-5	1.35-1.50	6-20	0.02-0.05	0.0-2.9	0.0-0.2	.10	.10			
68: Goldhead, depressional-----	0-6	0-15	1-5	1.30-1.50	6-20	0.05-0.15	0.0-2.9	2.0-4.0	.10	.10	5	8	0
	6-32	0-15	1-5	1.35-1.50	6-20	0.02-0.05	0.0-2.9	0.0-0.4	.10	.10			
	32-56	0-28	13-34	1.45-1.65	0.6-2	0.10-0.20	0.0-2.9	0.1-0.5	.24	.24			
	56-80	0-15	1-5	1.35-1.50	6-20	0.02-0.05	0.0-2.9	0.0-0.2	.10	.10			
Meadowbrook, depressional-----	0-6	0-15	0-3	1.35-1.65	6-20	0.05-0.10	0.0-2.9	2.0-6.0	.10	.10	5	8	0
	6-46	0-15	1-6	1.35-1.65	6-20	0.03-0.08	0.0-2.9	0.2-0.8	.10	.10			
	46-80	0-50	11-22	1.50-1.80	0.2-2	0.10-0.15	0.0-2.9	0.1-0.5	.15	.15			
69: Troup-----	0-5	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-60	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	60-80	0-50	15-35	1.40-1.60	0.6-2	0.10-0.13	0.0-2.9	0.0-0.2	.20	.20			
70: Troup-----	0-5	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-60	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	60-80	0-50	15-35	1.40-1.60	0.6-2	0.10-0.13	0.0-2.9	0.0-0.2	.20	.20			
71: Pits.													
72: Lakeland-----	0-5	0-15	2-8	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	5-80	0-15	1-6	1.50-1.60	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.10			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
73: Foxworth-----	0-9	0-15	1-8	1.25-1.45	6-20	0.05-0.10	0.0-2.9	0.5-2.0	.10	.10	5	1	180
	9-80	0-15	1-8	1.40-1.55	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
Hosford-----	0-66	0-15	2-8	1.30-1.50	6-20	0.05-0.10	0.0-2.9	5.0-15	.10	.10	5	1	160
	66-80	0-15	2-8	1.50-1.70	6-20	0.04-0.08	0.0-2.9	0.5-3.0	.17	.17			
Lucy-----	0-8	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	8-26	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	26-80	0-50	10-30	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.1-0.5	.24	.24			
74: Garcon-----	0-8	0-15	3-8	1.25-1.50	6-20	0.10-0.15	0.0-2.9	1.0-3.0	.10	.10	5	1	220
	8-22	0-15	3-8	1.40-1.65	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	22-44	0-50	12-20	1.55-1.70	0.6-2	0.10-0.15	0.0-2.9	0.1-0.5	.24	.24			
	44-80	0-15	5-10	1.55-1.70	0.6-2	0.07-0.10	0.0-2.9	0.0-0.2	.10	.10			
Ochlockonee-----	0-6	0-30	5-15	1.40-1.60	6-20	0.08-0.12	0.0-2.9	0.5-2.0	.15	.15	5	2	134
	6-45	0-30	8-18	1.40-1.60	0.6-2	0.10-0.20	0.0-2.9	0.1-0.5	.20	.20			
	45-80	0-50	6-18	1.40-1.70	2-6	0.06-0.12	0.0-2.9	0.1-0.5	.17	.17			
Ousley-----	0-7	0-15	1-3	1.35-1.45	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10	5	1	180
	7-25	0-15	1-2	1.45-1.60	6-20	0.02-0.06	0.0-2.9	0.0-0.5	.15	.15			
	25-80	0-15	1-2	1.45-1.60	6-20	0.02-0.06	0.0-2.9	0.0-0.5	.15	.15			
75: Brantley-----	0-6	0-50	8-21	1.35-1.65	0.6-2	0.10-0.15	0.0-2.9	1.0-4.0	.28	.28	5	3	86
	6-11	0-50	8-21	1.35-1.65	0.6-2	0.10-0.15	0.0-2.9	1.0-4.0	.28	.28			
	11-35	0-40	35-55	1.35-1.55	0.06-0.2	0.12-0.20	3.0-5.9	0.5-1.0	.28	.28			
	35-43	14-53	25-35	1.35-1.65	0.6-2	0.12-0.20	0.0-2.9	0.0-0.5	.24	.24			
	43-80	0-50	10-25	1.40-1.65	0.6-2	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
Okeelala-----	0-7	0-50	7-15	1.30-1.50	2-6	0.09-0.12	0.0-2.9	0.5-2.0	.20	.24	5	3	86
	7-16	0-50	7-15	1.30-1.50	2-6	0.09-0.12	0.0-2.9	0.1-0.5	.20	.24			
	16-52	0-35	18-36	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.1-0.5	.24	.24			
	52-80	0-50	2-18	1.40-1.60	2-6	0.07-0.12	0.0-2.9	0.0-0.2	.15	.17			
Lucy-----	0-8	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	2	180
	8-26	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	26-80	0-50	10-30	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.1-0.5	.24	.24			
78: Lucy-----	0-8	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	8-26	0-15	1-10	1.30-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.10	.10			
	26-80	0-50	10-30	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.1-0.5	.24	.24			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
78: Blanton-----	0-8	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-59	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	59-73	0-30	10-18	1.50-1.65	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.15	.15			
	73-80	0-50	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
Cowarts-----	0-8	0-50	7-20	1.30-1.65	2-6	0.08-0.13	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	8-12	0-50	10-30	1.30-1.50	0.6-2	0.10-0.16	0.0-2.9	0.2-1.0	.24	.24			
	12-25	0-28	25-40	1.30-1.50	0.2-2	0.10-0.16	0.0-2.9	0.0-0.5	.28	.28			
	25-80	0-28	18-35	1.45-1.75	0.06-0.6	0.10-0.14	0.0-2.9	0.0-0.5	.24	.24			
81: Scranton-----	0-9	0-15	2-8	1.30-1.60	6-20	0.05-0.10	0.0-2.9	1.0-4.0	.10	.10	5	1	220
	9-18	0-15	2-8	1.30-1.60	6-20	0.05-0.10	0.0-2.9	0.5-1.5	.10	.10			
	18-80	0-15	2-8	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.0-0.3	.10	.10			
82: Brickyard-----	0-4	14-53	28-60	1.30-1.60	0.06-0.2	0.14-0.18	6.0-8.9	3.0-8.0	.28	.28	5	4	86
	4-50	0-40	35-60	1.30-1.60	0.00-0.06	0.14-0.18	3.0-5.9	0.5-1.0	.37	.37			
	50-80	0-40	28-60	0.95-1.60	0.06-0.2	0.12-0.18	3.0-5.9	0.2-0.8	.32	.32			
Chowan-----	0-5	40-60	27-35	1.35-1.45	0.2-0.6	0.17-0.22	0.0-2.9	1.0-4.0	.32	.32	4	6	48
	5-35	40-60	18-35	1.40-1.60	0.2-0.6	0.15-0.20	0.0-2.9	0.1-1.0	.32	.32			
	35-80	---	2-12	0.40-0.65	0.2-6	0.20-0.26	---	20-80	---	---			
83: Plummer-----	0-10	0-15	1-7	1.35-1.65	6-20	0.03-0.08	0.0-2.9	1.0-10	.10	.10	5	1	180
	10-55	0-15	1-7	1.35-1.65	2-20	0.03-0.10	0.0-2.9	0.1-0.5	.10	.10			
	55-64	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.15	.15			
	64-80	0-28	15-30	1.50-1.70	0.2-2	0.07-0.15	0.0-2.9	0.0-0.5	.20	.20			
Sapelo-----	0-5	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	1.0-3.0	.10	.10	5	1	180
	5-12	0-15	2-5	1.40-1.65	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	12-17	0-15	3-7	1.35-1.60	0.6-2	0.10-0.15	0.0-2.9	2.0-4.0	.15	.15			
	17-51	0-15	3-6	1.50-1.70	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.17	.17			
	51-80	0-50	10-30	1.55-1.75	0.2-2	0.12-0.17	0.0-2.9	0.0-0.2	.24	.24			
Pottsburg-----	0-8	0-15	1-4	1.20-1.45	6-20	0.05-0.15	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-57	0-15	0-4	1.40-1.70	6-20	0.03-0.10	0.0-2.9	0.0-0.5	.10	.10			
	57-80	0-15	1-6	1.55-1.70	0.6-2	0.10-0.25	0.0-2.9	1.0-4.0	.15	.15			
91: Woodington-----	0-3	0-30	3-12	1.50-1.70	6-20	0.06-0.11	0.0-2.9	2.0-4.0	.15	.15	5	2	134
	3-13	0-50	5-18	1.45-1.65	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
	13-80	0-50	3-18	1.45-1.65	2-20	0.06-0.15	0.0-2.9	0.0-0.5	.10	.10			

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
92: Pamlico, frequently flooded-----	0-45 45-80	--- 0-15	0-0 5-10	0.20-0.65 1.60-1.75	0.6-6 6-20	0.24-0.40 0.02-0.10	--- 0.0-2.9	20-80 0.5-3.0	--- .10	--- .10	2	8	0
Pickney, frequently flooded-----	0-27 27-80	0-15 0-15	2-10 1-10	1.20-1.40 1.40-1.60	6-20 6-20	0.04-0.08 0.03-0.11	0.0-2.9 0.0-2.9	5.0-15 2.0-6.0	.10 .10	.10 .10	5	8	0
95: Bibb-----	0-5 5-15 15-45 45-80	0-50 0-50 0-55 0-30	2-18 2-18 2-18 2-18	1.50-1.70 1.50-1.70 1.45-1.75 1.45-1.75	0.6-2 0.6-2 0.6-2 2-6	0.12-0.18 0.12-0.18 0.10-0.20 0.10-0.20	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	1.0-3.0 0.5-2.0 0.5-1.0 0.5-1.0	.20 .20 .20 .17	.20 .20 .20 .17	5	3	86
Rains-----	0-4 4-13 13-65 65-80	0-50 0-50 0-28 0-20	7-18 7-18 18-35 18-40	1.30-1.60 1.30-1.60 1.30-1.60 1.30-1.50	2-6 2-6 0.6-2 0.6-2	0.08-0.12 0.08-0.12 0.11-0.15 0.10-0.15	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	1.0-6.0 0.5-2.0 0.5-1.0 0.5-1.0	.24 .24 .24 .28	.24 .24 .24 .28	5	3	86
Garcon-----	0-8 8-22 22-44 44-80	0-15 0-15 0-50 0-15	3-8 3-8 12-20 5-10	1.25-1.50 1.40-1.65 1.55-1.70 1.55-1.70	6-20 6-20 0.6-2 0.6-2	0.10-0.15 0.05-0.10 0.10-0.15 0.07-0.10	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	1.0-3.0 0.1-0.5 0.1-0.5 0.0-0.2	.10 .10 .24 .10	.10 .10 .24 .10	5	1	220
96: Foxworth-----	0-9 9-80	0-15 0-15	1-8 1-8	1.25-1.45 1.40-1.55	6-20 6-20	0.05-0.10 0.05-0.10	0.0-2.9 0.0-2.9	0.5-2.0 0.0-0.5	.10 .10	.10 .10	5	1	180
Lakeland-----	0-5 5-80	0-15 0-15	2-8 1-6	1.35-1.65 1.50-1.60	6-20 6-20	0.05-0.09 0.02-0.08	0.0-2.9 0.0-2.9	0.5-1.0 0.0-0.5	.10 .10	.10 .10	5	1	180
97: Foxworth-----	0-9 9-80	0-15 0-15	1-8 1-8	1.25-1.45 1.40-1.55	6-20 6-20	0.05-0.10 0.05-0.10	0.0-2.9 0.0-2.9	0.5-2.0 0.0-0.5	.10 .10	.10 .10	5	1	180
Lakeland-----	0-5 5-80	0-15 0-15	2-8 1-6	1.35-1.65 1.50-1.60	6-20 6-20	0.05-0.09 0.02-0.08	0.0-2.9 0.0-2.9	0.5-1.0 0.0-0.5	.10 .10	.10 .10	5	1	180
98: Leon, nonhydric-----	0-4 4-18 18-27 27-80	0-15 0-15 0-15 0-15	1-5 0-3 2-8 1-4	1.30-1.45 1.40-1.60 1.25-1.65 1.50-1.65	6-20 6-20 0.6-6 2-20	0.05-0.15 0.02-0.05 0.15-0.30 0.05-0.10	0.0-2.9 0.0-2.9 0.0-2.9 0.0-2.9	0.5-4.0 0.0-0.5 2.0-4.0 0.0-0.5	.10 .10 .15 .10	.10 .10 .15 .10	5	1	180

Table 16.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Silt	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
									Kw	Kf	T		
	In	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
98: Chipley-----	0-6	0-15	1-5	1.35-1.45	6-20	0.05-0.10	0.0-2.9	2.0-5.0	.10	.10	5	1	180
	6-80	0-15	1-7	1.45-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
Leon, hydric-----	0-4	0-15	1-5	1.30-1.45	6-20	0.05-0.15	0.0-2.9	0.5-4.0	.10	.10	5	1	180
	4-18	0-15	0-3	1.40-1.60	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.10			
	18-27	0-15	2-8	1.25-1.65	0.6-6	0.15-0.30	0.0-2.9	2.0-4.0	.15	.15			
	27-80	0-15	1-4	1.50-1.65	2-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.10			
99: Water.													
101: Albany-----	0-6	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	1.0-2.0	.10	.10	5	1	180
	6-47	0-15	1-10	1.40-1.55	6-20	0.02-0.04	0.0-2.9	0.1-0.5	.10	.10			
	47-80	0-50	13-35	1.55-1.65	0.2-2	0.10-0.16	0.0-2.9	0.0-0.5	.20	.20			
Blanton-----	0-8	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.5-3.0	.10	.10	5	1	180
	8-59	0-15	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	0.1-0.5	.10	.10			
	59-73	0-30	10-18	1.50-1.65	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.15	.15			
	73-80	0-50	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties

[Absence of an entry indicates that data were not estimated]

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
2:							
Albany-----	0-6	---	0.1-1.8	3.5-6.5	0	0.0-2.0	0-4
	6-47	---	0.0-4.5	3.5-6.5	0	0.0-2.0	0-4
	47-80	---	0.4-4.7	4.5-6.0	0	0.0-2.0	0-4
4:							
Alpin-----	0-10	1.0-6.8	---	4.5-6.5	0	0.0-2.0	0-4
	10-45	0.8-5.4	---	4.5-6.5	0	0.0-2.0	0-4
	45-80	3.1-6.1	---	4.5-6.5	0	0.0-2.0	0-4
Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
5:							
Rains-----	0-4	2.6-6.8	---	4.5-6.5	0	0.0-2.0	0-4
	4-13	2.6-6.6	---	4.5-6.5	0	0.0-2.0	0-4
	13-65	---	3.3-6.9	3.5-5.5	0	0.0-2.0	0-4
	65-80	---	3.3-8.0	3.5-5.5	0	0.0-2.0	0-4
Bladen-----	0-5	---	1.6-3.6	3.5-5.5	0	0.0-2.0	0-4
	5-14	---	0.4-1.8	3.5-5.5	0	0.0-2.0	0-4
	14-40	---	6.8-12	3.5-5.5	0	0.0-2.0	0-4
	40-80	---	6.9-16	3.5-5.5	0	0.0-2.0	0-4
6:							
Blanton-----	0-8	---	0.1-1.1	4.5-6.0	0	0.0-2.0	0-4
	8-59	---	0.0-3.2	4.5-6.0	0	0.0-2.0	0-4
	59-73	---	0.4-2.5	4.5-5.5	0	0.0-2.0	0-4
	73-80	---	0.5-4.7	4.5-5.5	0	0.0-2.0	0-4
7:							
Blanton-----	0-8	---	0.1-1.1	4.5-6.0	0	0.0-2.0	0-4
	8-59	---	0.0-3.2	4.5-6.0	0	0.0-2.0	0-4
	59-73	---	0.4-2.5	4.5-5.5	0	0.0-2.0	0-4
	73-80	---	0.5-4.7	4.5-5.5	0	0.0-2.0	0-4
8:							
Brickyard-----	0-4	27-72	---	5.6-7.3	0	0.0-2.0	0-4
	4-50	18-36	---	5.6-8.4	0-5	0.0-2.0	0-4
	50-80	12-33	---	5.6-8.4	0-5	0.0-2.0	0-4
9:							
Centenary-----	0-5	1.0-5.3	---	4.5-6.5	0	0.0-2.0	0-4
	5-68	---	0.0-3.6	4.5-6.0	0	0.0-2.0	0-4
	68-80	---	0.3-4.0	4.5-6.0	0	0.0-2.0	0-4
11:							
Chipley-----	0-6	---	0.8-4.0	3.5-6.0	0	0.0-2.0	0-4
	6-80	0.8-5.4	---	4.5-6.5	0	0.0-2.0	0-4
Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
12:							
Rutlege-----	0-12	---	0.7-6.8	3.5-5.5	0	0.0-2.0	0-4
	12-80	---	0.4-5.8	3.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
12: Plummer-----	0-10	---	0.1-1.3	3.5-5.5	0	0.0-2.0	0-4
	10-55	---	0.0-3.0	3.5-5.5	0	0.0-2.0	0-4
	55-64	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
	64-80	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
13: Dorovan-----	0-53	---	2.5-7.5	3.5-4.4	0	0.0-2.0	0-4
	53-80	---	2.5-7.5	3.5-4.4	0	0.0-2.0	0-4
Pamlico-----	0-45	---	2.5-8.5	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.0-5.7	3.5-5.5	0	0.0-2.0	0-4
14: Dothan-----	0-6	---	0.1-3.8	4.5-6.0	0	0.0-2.0	0-4
	6-12	---	0.2-7.4	4.5-6.0	0	0.0-2.0	0-4
	12-35	---	0.2-5.9	4.5-6.0	0	0.0-2.0	0-4
	35-80	---	2.1-8.7	4.5-6.0	0	0.0-2.0	0-4
15: Dothan-----	0-6	---	0.1-3.8	4.5-6.0	0	0.0-2.0	0-4
	6-12	---	0.2-7.4	4.5-6.0	0	0.0-2.0	0-4
	12-35	---	0.2-5.9	4.5-6.0	0	0.0-2.0	0-4
	35-80	---	2.1-8.7	4.5-6.0	0	0.0-2.0	0-4
17: Dothan-----	0-6	---	0.1-3.8	4.5-6.0	0	0.0-2.0	0-4
	6-12	---	0.2-7.4	4.5-6.0	0	0.0-2.0	0-4
	12-35	---	0.2-5.9	4.5-6.0	0	0.0-2.0	0-4
	35-80	---	2.1-8.7	4.5-6.0	0	0.0-2.0	0-4
Fuquay-----	0-6	---	0.2-0.5	4.5-6.0	0	0.0-2.0	0-4
	6-26	---	0.1-4.2	4.5-6.0	0	0.0-2.0	0-4
	26-50	---	0.3-0.6	4.5-6.0	0	0.0-2.0	0-4
	50-80	---	0.3-0.5	4.5-6.0	0	0.0-2.0	0-4
24: Goldsboro-----	0-4	---	0.1-1.7	3.5-5.5	0	0.0-2.0	0-4
	4-14	---	0.1-4.4	3.5-5.5	0	0.0-2.0	0-4
	14-80	---	0.6-5.1	3.5-5.5	0	0.0-2.0	0-4
25: Goldsboro-----	0-4	---	0.1-1.7	3.5-5.5	0	0.0-2.0	0-4
	4-14	---	0.1-4.4	3.5-5.5	0	0.0-2.0	0-4
	14-80	---	0.6-5.1	3.5-5.5	0	0.0-2.0	0-4
26: Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
27: Fuquay-----	0-6	---	0.2-0.5	4.5-6.0	0	0.0-2.0	0-4
	6-26	---	0.1-4.2	4.5-6.0	0	0.0-2.0	0-4
	26-50	---	0.3-0.6	4.5-6.0	0	0.0-2.0	0-4
	50-80	---	0.3-0.5	4.5-6.0	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
30:							
Elloree-----	0-5	1.1-4.5	---	4.5-7.3	0	0	0
	5-29	0.6-3.3	---	5.1-7.3	0	0	0
	29-45	4.8-14	---	5.1-8.4	0	0	0
	45-57	2.7-9.7	---	5.1-8.4	0	0	0
	57-80	2.7-13	---	5.1-8.4	0	0	0
Bibb-----	0-5	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
	5-15	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	15-45	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
Meggett-----	0-4	2.8-11	---	4.5-6.5	0	0.0-2.0	0-4
	4-13	2.7-11	---	4.5-6.5	0	0.0-2.0	0-4
	13-21	16-32	---	5.1-8.4	0-15	0.0-2.0	0-4
	21-72	18-32	---	6.1-8.4	0-15	0.0-2.0	0-4
	72-80	13-26	---	6.1-8.4	0-15	0.0-2.0	0-4
31:							
Hurricane-----	0-8	---	0.2-2.5	3.5-6.0	0	0.0-2.0	0-4
	8-64	---	0.0-2.2	3.5-6.0	0	0.0-2.0	0-4
	64-80	---	0.3-4.1	3.5-6.0	0	0.0-2.0	0-4
Chipley-----	0-6	---	0.8-4.0	3.5-6.0	0	0.0-2.0	0-4
	6-80	0.8-5.4	---	4.5-6.5	0	0.0-2.0	0-4
32:							
Plummer-----	0-10	---	0.1-1.3	3.5-5.5	0	0.0-2.0	0-4
	10-55	---	0.0-3.0	3.5-5.5	0	0.0-2.0	0-4
	55-64	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
	64-80	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
Pelham-----	0-7	---	0.2-2.0	3.5-5.5	0	0.0-2.0	0-4
	7-37	---	0.0-4.4	3.5-5.5	0	0.0-2.0	0-4
	37-48	---	0.5-5.4	3.5-5.5	0	0.0-2.0	0-4
	48-80	---	0.5-5.9	3.5-5.5	0	0.0-2.0	0-4
34:							
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
35:							
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
36:							
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
37:							
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
38:							
Leefield-----	0-3	---	0.1-1.6	4.5-6.0	0	0.0-2.0	0-4
	3-21	---	0.3-7.0	4.5-6.0	0	0.0-2.0	0-4
	21-33	---	0.5-3.6	4.5-5.5	0	0.0-2.0	0-4
	33-80	---	0.5-3.7	4.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
39:							
Leon, nonhydic-----	0-4	---	0.2-3.5	3.5-6.5	0	0.0-2.0	0-4
	4-18	---	0.0-1.9	3.5-6.5	0	0.0-2.0	0-4
	18-27	---	0.5-4.5	3.5-6.5	0	0.0-2.0	0-4
	27-80	---	0.1-1.6	3.5-6.5	0	0.0-2.0	0-4
Leon, hydric-----	0-4	---	0.2-3.5	3.5-6.5	0	0.0-2.0	0-4
	4-18	---	0.0-1.9	3.5-6.5	0	0.0-2.0	0-4
	18-27	---	0.5-4.5	3.5-6.5	0	0.0-2.0	0-4
	27-80	---	0.1-1.6	3.5-6.5	0	0.0-2.0	0-4
42:							
Lucy-----	0-8	0.1-3.4	---	5.1-6.0	0	0.0-2.0	0-4
	8-26	0.1-2.9	---	5.1-6.0	0	0.0-2.0	0-4
	26-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
44:							
Lynchburg-----	0-5	---	0.3-1.9	3.5-6.0	0	0.0-2.0	0-4
	5-14	---	0.2-2.3	3.5-5.5	0	0.0-2.0	0-4
	14-48	---	3.5-8.4	3.5-5.5	0	0.0-2.0	0-4
	48-80	---	5.3-12	3.5-5.5	0	0.0-2.0	0-4
45:							
Lynn Haven-----	0-3	---	0.3-3.5	3.5-5.5	0	0.0-2.0	0-4
	3-29	---	0.0-1.6	3.5-5.5	0	0.0-2.0	0-4
	29-35	---	0.4-4.5	3.5-5.5	0	0.0-2.0	0-4
	35-80	---	0.1-1.6	3.5-5.5	0	0.0-2.0	0-4
46:							
Hurricane-----	0-8	---	0.2-2.5	3.5-6.0	0	0.0-2.0	0-4
	8-64	---	0.0-2.2	3.5-6.0	0	0.0-2.0	0-4
	64-80	---	0.3-4.1	3.5-6.0	0	0.0-2.0	0-4
Leon-----	0-4	---	0.2-3.5	3.5-6.5	0	0.0-2.0	0-4
	4-18	---	0.0-1.9	3.5-6.5	0	0.0-2.0	0-4
	18-27	---	0.5-4.5	3.5-6.5	0	0.0-2.0	0-4
	27-80	---	0.1-1.6	3.5-6.5	0	0.0-2.0	0-4
Albany-----	0-6	---	0.1-1.8	3.5-6.5	0	0.0-2.0	0-4
	6-47	---	0.0-4.5	3.5-6.5	0	0.0-2.0	0-4
	47-80	---	0.4-4.7	4.5-6.0	0	0.0-2.0	0-4
47:							
Torhunta-----	0-13	---	1.4-4.6	3.5-5.5	0	0.0-2.0	0-4
	13-35	---	1.1-5.7	3.5-5.5	0	0.0-2.0	0-4
	35-80	---	0.4-5.7	3.5-6.5	0	0.0-2.0	0-4
Lynn Haven-----	0-3	---	0.3-3.5	3.5-5.5	0	0.0-2.0	0-4
	3-29	---	0.0-1.6	3.5-5.5	0	0.0-2.0	0-4
	29-35	---	0.4-4.5	3.5-5.5	0	0.0-2.0	0-4
	35-80	---	0.1-1.6	3.5-5.5	0	0.0-2.0	0-4
Croatan-----	0-48	---	2.1-6.1	2.0-4.4	0	0.0-2.0	0-4
	48-62	---	3.4-27	3.5-6.5	0	0.0-2.0	0-4
	62-80	---	1.9-16	3.5-6.5	0	0.0-2.0	0-4
48:							
Meadowbrook, nonhydic-----	0-6	0.0-0.6	---	3.5-7.3	0	0.0-2.0	0-4
	6-46	0.2-1.2	---	3.5-8.4	0	0.0-2.0	0-4
	46-80	2.1-4.3	---	4.5-8.4	0-5	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
48: Meadowbrook, hydric--	0-6	0.0-0.6	---	3.5-7.3	0	0.0-2.0	0-4
	6-46	0.2-1.2	---	3.5-8.4	0	0.0-2.0	0-4
	46-80	2.1-4.3	---	4.5-8.4	0-5	0.0-2.0	0-4
49: Meadowbrook, slough--	0-6	0.0-0.6	---	3.5-7.3	0	0.0-2.0	0-4
	6-46	0.2-1.2	---	3.5-8.4	0	0.0-2.0	0-4
	46-80	2.1-4.3	---	4.5-8.4	0-5	0.0-2.0	0-4
54: Pelham, nonhydric----	0-7	---	0.2-2.0	3.5-5.5	0	0.0-2.0	0-4
	7-37	---	0.0-4.4	3.5-5.5	0	0.0-2.0	0-4
	37-48	---	0.5-5.4	3.5-5.5	0	0.0-2.0	0-4
	48-80	---	0.5-5.9	3.5-5.5	0	0.0-2.0	0-4
Pelham, hydric-----	0-7	---	0.2-2.0	3.5-5.5	0	0.0-2.0	0-4
	7-37	---	0.0-4.4	3.5-5.5	0	0.0-2.0	0-4
	37-48	---	0.5-5.4	3.5-5.5	0	0.0-2.0	0-4
	48-80	---	0.5-5.9	3.5-5.5	0	0.0-2.0	0-4
55: Plummer, nonhydric---	0-10	---	0.1-1.3	3.5-5.5	0	0.0-2.0	0-4
	10-55	---	0.0-3.0	3.5-5.5	0	0.0-2.0	0-4
	55-64	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
	64-80	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
Plummer, hydric-----	0-10	---	0.1-1.3	3.5-5.5	0	0.0-2.0	0-4
	10-55	---	0.0-3.0	3.5-5.5	0	0.0-2.0	0-4
	55-64	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
	64-80	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
56: Pottsburg, nonhydric-	0-8	---	0.2-2.8	3.5-6.5	0	0.0-2.0	0-4
	8-57	---	0.0-2.3	3.5-6.5	0	0.0-2.0	0-4
	57-80	---	0.3-3.8	3.5-6.0	0	0.0-2.0	0-4
Pottsburg, hydric----	0-8	---	0.2-2.8	3.5-6.5	0	0.0-2.0	0-4
	8-57	---	0.0-2.3	3.5-6.5	0	0.0-2.0	0-4
	57-80	---	0.3-3.8	3.5-6.0	0	0.0-2.0	0-4
57: Surrency, depressional-----	0-13	---	0.3-1.7	3.5-5.5	0	0.0-2.0	0-4
	13-27	---	0.1-5.1	3.5-5.5	0	0.0-2.0	0-4
	27-44	---	1.8-4.7	3.5-5.5	0	0.0-2.0	0-4
	44-80	---	1.9-4.9	3.5-5.5	0	0.0-2.0	0-4
Pantego, depressional	0-16	---	0.8-2.5	3.5-5.5	0	0.0-2.0	0-4
	16-80	---	3.2-6.9	3.5-5.5	0	0.0-2.0	0-4
Croatan, depressional	0-48	---	2.1-6.1	2.0-4.4	0	0.0-2.0	0-4
	48-62	---	3.4-27	3.5-6.5	0	0.0-2.0	0-4
	62-80	---	1.9-16	3.5-6.5	0	0.0-2.0	0-4
58: Rutlege-----	0-12	---	0.7-6.8	3.5-5.5	0	0.0-2.0	0-4
	12-80	---	0.4-5.8	3.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
58:							
Bibb-----	0-5	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
	5-15	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	15-45	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
Surrency-----	0-13	---	0.3-1.7	3.5-5.5	0	0.0-2.0	0-4
	13-27	---	0.1-5.1	3.5-5.5	0	0.0-2.0	0-4
	27-44	---	1.8-4.7	3.5-5.5	0	0.0-2.0	0-4
	44-80	---	1.9-4.9	3.5-5.5	0	0.0-2.0	0-4
59:							
Hosford-----	0-66	---	0.8-7.1	3.5-5.5	0	0.0-2.0	0-4
	66-80	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
60:							
Sapelo, nonhydric----	0-5	---	0.4-3.2	3.5-5.5	0	0.0-2.0	0-4
	5-12	---	0.1-2.4	3.5-5.5	0	0.0-2.0	0-4
	12-17	---	0.6-4.2	3.5-5.5	0	0.0-2.0	0-4
	17-51	---	0.1-2.7	3.5-5.5	0	0.0-2.0	0-4
	51-80	---	0.3-5.1	3.5-5.5	0	0.0-2.0	0-4
Sapelo, hydric-----	0-5	---	0.4-3.2	3.5-5.5	0	0.0-2.0	0-4
	5-12	---	0.1-2.4	3.5-5.5	0	0.0-2.0	0-4
	12-17	---	0.6-4.2	3.5-5.5	0	0.0-2.0	0-4
	17-51	---	0.1-2.7	3.5-5.5	0	0.0-2.0	0-4
	51-80	---	0.3-5.1	3.5-5.5	0	0.0-2.0	0-4
61:							
Osier-----	0-7	---	0.8-5.9	3.5-6.0	0	0.0-2.0	0-4
	7-36	---	0.2-2.4	3.5-6.0	0	0.0-2.0	0-4
	36-80	---	0.2-1.6	3.5-6.0	0	0.0-2.0	0-4
62:							
Scranton, slough----	0-9	4.2-10	---	4.5-6.5	0	0.0-2.0	0-4
	9-18	---	0.6-3.4	4.5-6.0	0	0.0-2.0	0-4
	18-80	---	0.2-2.0	4.5-6.0	0	0.0-2.0	0-4
63:							
Stilson-----	0-6	---	0.2-1.2	4.5-5.5	0	0.0-2.0	0-4
	6-26	---	0.1-2.6	4.5-5.5	0	0.0-2.0	0-4
	26-30	---	0.5-4.2	4.5-5.5	0	0.0-2.0	0-4
	30-80	---	0.5-4.2	4.5-5.5	0	0.0-2.0	0-4
65:							
Pickney-----	0-27	---	0.8-7.8	3.5-5.5	0	0.0-2.0	0-4
	27-80	---	0.4-6.1	3.5-6.0	0	0.0-2.0	0-4
Bibb-----	0-5	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
	5-15	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	15-45	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
Dorovan-----	0-53	---	2.5-7.5	3.5-4.4	0	0.0-2.0	0-4
	53-80	---	2.5-7.5	3.5-4.4	0	0.0-2.0	0-4
66:							
Wahee-----	0-6	---	1.1-3.3	4.5-6.0	0	0.0-2.0	0-4
	6-14	---	0.3-1.3	4.5-6.0	0	0.0-2.0	0-4
	14-80	---	6.9-16	3.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
66: Ochlockonee-----	0-6	2.7-8.2	---	4.5-6.5	0	0.0-2.0	0-4
	6-45	---	2.2-6.9	4.5-5.5	0	0.0-2.0	0-4
	45-80	---	1.6-6.9	4.5-5.5	0	0.0-2.0	0-4
67: Goldhead-----	0-6	0.6-2.8	---	4.5-7.8	0	0.0-2.0	0-4
	6-32	0.5-2.7	---	4.5-7.8	0	0.0-2.0	0-4
	32-56	6.8-18	---	4.5-8.4	0	0.0-2.0	0-4
	56-80	0.5-2.7	---	4.5-7.8	0	0.0-2.0	0-4
68: Goldhead, depressional-----	0-6	0.6-2.8	---	4.5-7.8	0	0.0-2.0	0-4
	6-32	0.5-2.7	---	4.5-7.8	0	0.0-2.0	0-4
	32-56	6.8-18	---	4.5-8.4	0	0.0-2.0	0-4
	56-80	0.5-2.7	---	4.5-7.8	0	0.0-2.0	0-4
Meadowbrook, depressional-----	0-6	0.0-0.6	---	3.5-7.3	0	0.0-2.0	0-4
	6-46	0.2-1.2	---	3.5-8.4	0	0.0-2.0	0-4
	46-80	2.1-4.3	---	4.5-8.4	0-5	0.0-2.0	0-4
69: Troup-----	0-5	---	0.2-0.5	4.5-6.0	0	0.0-2.0	0-4
	5-60	---	0.0-4.2	4.5-6.0	0	0.0-2.0	0-4
	60-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
70: Troup-----	0-5	---	0.2-0.5	4.5-6.0	0	0.0-2.0	0-4
	5-60	---	0.0-4.2	4.5-6.0	0	0.0-2.0	0-4
	60-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
71: Pits.							
72: Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
73: Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
Hosford-----	0-66	---	0.8-7.1	3.5-5.5	0	0.0-2.0	0-4
	66-80	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
Lucy-----	0-8	0.1-3.4	---	5.1-6.0	0	0.0-2.0	0-4
	8-26	0.1-2.9	---	5.1-6.0	0	0.0-2.0	0-4
	26-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
74: Garcon-----	0-8	---	0.6-2.1	4.5-5.5	0	0.0-2.0	0-4
	8-22	---	0.1-3.4	4.5-5.5	0	0.0-2.0	0-4
	22-44	---	3.6-7.7	4.5-5.5	0	0.0-2.0	0-4
	44-80	---	1.4-4.3	4.5-5.5	0	0.0-2.0	0-4
Ochlockonee-----	0-6	2.7-8.2	---	4.5-6.5	0	0.0-2.0	0-4
	6-45	---	2.2-6.9	4.5-5.5	0	0.0-2.0	0-4
	45-80	---	1.6-6.9	4.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
74: Ousley-----	0-7	---	0.2-1.1	4.5-6.0	0	0.0-2.0	0-4
	7-25	---	0.1-0.8	4.5-6.0	0	0.0-2.0	0-4
	25-80	---	0.1-0.8	4.5-6.0	0	0.0-2.0	0-4
75: Brantley-----	0-6	4.3-11	---	4.5-6.5	0	0.0-2.0	0-4
	6-11	4.3-11	---	4.5-6.5	0	0.0-2.0	0-4
	11-35	---	11-21	4.5-6.0	0	0.0-2.0	0-4
	35-43	---	8.3-18	4.5-5.5	0	0.0-2.0	0-4
	43-80	---	2.9-12	4.5-5.5	0	0.0-2.0	0-4
Okeelala-----	0-7	---	1.2-2.9	4.5-5.5	0	0.0-2.0	0-4
	7-16	---	0.2-8.5	4.5-5.5	0	0.0-2.0	0-4
	16-52	---	3.5-7.8	4.5-5.5	0	0.0-2.0	0-4
	52-80	---	0.4-4.2	4.5-5.5	0	0.0-2.0	0-4
Lucy-----	0-8	0.1-3.4	---	5.1-6.0	0	0.0-2.0	0-4
	8-26	0.1-2.9	---	5.1-6.0	0	0.0-2.0	0-4
	26-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
78: Lucy-----	0-8	0.1-3.4	---	5.1-6.0	0	0.0-2.0	0-4
	8-26	0.1-2.9	---	5.1-6.0	0	0.0-2.0	0-4
	26-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
Blanton-----	0-8	---	0.1-1.1	4.5-6.0	0	0.0-2.0	0-4
	8-59	---	0.0-3.2	4.5-6.0	0	0.0-2.0	0-4
	59-73	---	0.4-2.5	4.5-5.5	0	0.0-2.0	0-4
	73-80	---	0.5-4.7	4.5-5.5	0	0.0-2.0	0-4
Cowarts-----	0-8	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
	8-12	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
	12-25	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
	25-80	---	0.3-0.6	4.5-5.5	0	0.0-2.0	0-4
81: Scranton-----	0-9	1.9-7.1	---	4.5-6.5	0	0.0-2.0	0-4
	9-18	1.8-6.6	---	4.5-6.5	0	0.0-2.0	0-4
	18-80	---	0.2-2.0	4.5-6.0	0	0.0-2.0	0-4
82: Brickyard-----	0-4	27-72	---	5.6-7.3	0	0.0-2.0	0-4
	4-50	18-36	---	5.6-8.4	0-5	0.0-2.0	0-4
	50-80	12-33	---	5.6-8.4	0-5	0.0-2.0	0-4
Chowan-----	0-5	---	7.2-11	3.5-6.0	0	0.0-2.0	0-4
	5-35	---	5.3-15	3.5-6.0	0	0.0-2.0	0-4
	35-80	---	2.5-8.0	3.5-5.0	0	0.0-2.0	0-4
83: Plummer-----	0-10	---	0.1-1.3	3.5-5.5	0	0.0-2.0	0-4
	10-55	---	0.0-3.0	3.5-5.5	0	0.0-2.0	0-4
	55-64	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
	64-80	---	0.5-4.6	3.5-5.5	0	0.0-2.0	0-4
Sapelo-----	0-5	---	0.4-3.2	3.5-5.5	0	0.0-2.0	0-4
	5-12	---	0.1-2.4	3.5-5.5	0	0.0-2.0	0-4
	12-17	---	0.6-4.2	3.5-5.5	0	0.0-2.0	0-4
	17-51	---	0.1-2.7	3.5-5.5	0	0.0-2.0	0-4
	51-80	---	0.3-5.1	3.5-5.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
83: Pottsburg-----	0-8	---	0.2-2.8	3.5-6.5	0	0.0-2.0	0-4
	8-57	---	0.0-2.3	3.5-6.5	0	0.0-2.0	0-4
	57-80	---	0.3-3.8	3.5-6.0	0	0.0-2.0	0-4
91: Woodington-----	0-3	---	0.5-2.1	3.5-5.5	0	0.0-2.0	0-4
	3-13	---	0.1-9.7	3.5-5.5	0	0.0-2.0	0-4
	13-80	---	0.5-4.2	3.5-5.5	0	0.0-2.0	0-4
92: Pamlico, frequently flooded-----	0-45	---	2.5-8.5	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.0-5.7	3.5-5.5	0	0.0-2.0	0-4
Pickney, frequently flooded-----	0-27	---	0.8-7.8	3.5-5.5	0	0.0-2.0	0-4
	27-80	---	0.4-6.1	3.5-6.0	0	0.0-2.0	0-4
95: Bibb-----	0-5	---	0.4-5.3	3.5-5.5	0	0.0-2.0	0-4
	5-15	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	15-45	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
	45-80	---	0.4-5.7	3.5-5.5	0	0.0-2.0	0-4
Rains-----	0-4	2.6-6.8	---	4.5-6.5	0	0.0-2.0	0-4
	4-13	2.6-6.6	---	4.5-6.5	0	0.0-2.0	0-4
	13-65	---	3.3-6.9	3.5-5.5	0	0.0-2.0	0-4
	65-80	---	3.3-8.0	3.5-5.5	0	0.0-2.0	0-4
Garcon-----	0-8	---	0.6-2.1	4.5-5.5	0	0.0-2.0	0-4
	8-22	---	0.1-3.4	4.5-5.5	0	0.0-2.0	0-4
	22-44	---	3.6-7.7	4.5-5.5	0	0.0-2.0	0-4
	44-80	---	1.4-4.3	4.5-5.5	0	0.0-2.0	0-4
96: Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
97: Foxworth-----	0-9	---	0.4-4.1	4.5-6.0	0	0.0-2.0	0-4
	9-80	---	0.1-2.4	4.5-6.0	0	0.0-2.0	0-4
Lakeland-----	0-5	---	0.8-3.2	4.5-6.0	0	0.0-2.0	0-4
	5-80	---	0.1-1.9	4.5-6.0	0	0.0-2.0	0-4
98: Leon, nonhydric-----	0-4	---	0.2-3.5	3.5-6.5	0	0.0-2.0	0-4
	4-18	---	0.0-1.9	3.5-6.5	0	0.0-2.0	0-4
	18-27	---	0.5-4.5	3.5-6.5	0	0.0-2.0	0-4
	27-80	---	0.1-1.6	3.5-6.5	0	0.0-2.0	0-4
Chipley-----	0-6	---	0.8-4.0	3.5-6.0	0	0.0-2.0	0-4
	6-80	0.8-5.4	---	4.5-6.5	0	0.0-2.0	0-4

Soil Survey of Liberty County, Florida

Table 17.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Salinity	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	<i>mmhos/cm</i>	
98: Leon, hydric-----	0-4	---	0.2-3.5	3.5-6.5	0	0.0-2.0	0-4
	4-18	---	0.0-1.9	3.5-6.5	0	0.0-2.0	0-4
	18-27	---	0.5-4.5	3.5-6.5	0	0.0-2.0	0-4
	27-80	---	0.1-1.6	3.5-6.5	0	0.0-2.0	0-4
99: Water.							
101: Albany-----	0-6	---	0.1-1.8	3.5-6.5	0	0.0-2.0	0-4
	6-47	---	0.0-4.5	3.5-6.5	0	0.0-2.0	0-4
	47-80	---	0.4-4.7	4.5-6.0	0	0.0-2.0	0-4
Blanton-----	0-8	---	0.1-1.1	4.5-6.0	0	0.0-2.0	0-4
	8-59	---	0.0-3.2	4.5-6.0	0	0.0-2.0	0-4
	59-73	---	0.4-2.5	4.5-5.5	0	0.0-2.0	0-4
	73-80	---	0.5-4.7	4.5-5.5	0	0.0-2.0	0-4

Table 18.--Water Features

[See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated]

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
2: Albany-----	C	Jan-Mar	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
4: Alpin-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
5: Rains-----	B/D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Bladen-----	D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
6: Blanton-----	A	Jan-Mar	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
7: Blanton-----	A	Jan-Mar	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
8: Brickyard-----	D	Jan-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
9: Centenary-----	A	Jan-Mar	3.5-5.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-5.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
11: Chipley-----	C	Jan-Mar	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
12: Rutlege-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-2.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
Plummer-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-2.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
13: Dorovan-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
Pamlico-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
14: Dothan-----	B	Jan-Mar	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
15: Dothan-----	B	Jan-Mar	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
17: Dothan-----	B	Jan-Mar	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	2.5-4.0	3.5-5.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Fuquay-----	B	Jan-Mar	3.5-4.5	4.0-5.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-4.5	4.0-5.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
24: Goldsboro-----	B	Jan-Apr	1.5-3.0	> 6.0	Perched	---	---	None	---	None
		May-Nov	> 6.0	> 6.0	---	---	---	None	---	None
		Dec	1.5-3.0	> 6.0	Perched	---	---	None	---	None
25: Goldsboro-----	B	Jan-Mar	1.5-3.0	> 6.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.5-3.0	> 6.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
26: Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
27: Fuquay-----	B	Jan-Mar	3.5-4.5	4.0-5.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-4.5	4.0-5.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
30: Elloree-----	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	Long	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Bibb-----	D	Jan-Mar	0.5-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	0.5-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
30: Meggett-----	D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	---	
Jul-Sep		0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	---	
31: Hurricane-----	C	Jan-Mar	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		1.5-3.5	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	
Chipley-----	C	Jan-Mar	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		1.5-3.5	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	
32: Plummer-----	B/D	Jan-Sep	0.0-0.5	> 6.0	Apparent	0.0-0.5	Long	Frequent	---	None
Oct-Dec		> 6.0	> 6.0	---	---	---	---	---	None	
Pelham-----	B/D	Jan-Sep	0.0-0.5	> 6.0	Apparent	0.0-0.5	Long	Frequent	---	None
Oct-Dec		> 6.0	> 6.0	---	---	---	---	---	None	
34: Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
35: Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
36: Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
37: Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		3.5-6.0	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
38: Leefield-----	C	Jan-Mar	1.5-2.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.5-2.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
39: Leon, nonhydic-----	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Leon, hydric-----	B/D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
42: Lucy-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
44: Lynchburg-----	C	Jan-Mar	1.5-2.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.5-2.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
45: Lynn Haven-----	B/D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
46: Hurricane-----	C	Jan-Mar	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Leon-----	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
46: Albany-----	C	Jan-Mar	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
47: Torhunta-----	D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Lynn Haven-----	B/D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	Long	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Croatan-----	D	Jan-Mar	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	---	Long	Frequent
		Jul-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		Oct	> 6.0	> 6.0	---	---	---	---	Long	Frequent
		Nov	0.0	> 6.0	Apparent	---	---	---	Long	Frequent
		Dec	> 6.0	> 6.0	---	---	---	---	Long	Frequent
48: Meadowbrook, nonhydic-----	B/D	Jan-Mar	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Meadowbrook, hydric---	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
49: Meadowbrook, slough---	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	Brief	Frequent
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	Brief	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
54: Pelham, nonhydic-----	B/D	Jan-Mar	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Pelham, hydric-----	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
55: Plummer, nonhydic----	B/D	Jan-Mar	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Plummer, hydric-----	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
56: Pottsburg, nonhydic--	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Pottsburg, hydric-----	B/D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
57: Surrency-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
Pantego-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None
Croatan-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	---	None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
58: Rutlege-----	D	Jan-Sep Oct-Dec	0.0-0.5 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
Bibb-----	D	Jan-Sep Oct-Dec	0.5-1.0 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
Surrency-----	D	Jan-Sep Oct-Dec	0.0-0.5 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
59: Hosford-----	D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.0-0.5 > 6.0 0.0-0.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None
60: Sapelo, nonhydric----	B/D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.5-1.5 > 6.0 0.5-1.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None
Sapelo, hydric-----	D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.0-0.5 > 6.0 0.0-0.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None
61: Osier-----	A/D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.0-0.5 > 6.0 0.0-0.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None
62: Scranton, slough-----	A/D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.0-0.5 > 6.0 0.0-0.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	Brief --- Brief ---	Frequent --- Frequent ---
63: Stilson-----	B	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	2.5-3.0 > 6.0 2.5-3.0 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Perched --- Perched ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
65: Pickney-----	D	Jan-Sep Oct-Dec	0.0 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
Bibb-----	D	Jan-Sep Oct-Dec	0.5-1.0 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
Dorovan-----	D	Jan-Sep Oct-Dec	0.0 > 6.0	> 6.0 > 6.0	Apparent ---	--- ---	--- ---	None None	Long ---	Frequent ---
66: Wahee-----	C	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	1.5-2.5 > 6.0 1.5-2.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	Long --- Long ---	Occasional --- Occasional ---
Ochlockonee-----	B	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	3.0-5.0 > 6.0 3.0-5.0 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	Brief --- Brief ---	Occasional --- Occasional ---
67: Goldhead-----	B/D	Jan-Mar Apr-Jun Jul-Sep Oct-Dec	0.5-1.5 > 6.0 0.5-1.5 > 6.0	> 6.0 > 6.0 > 6.0 > 6.0	Apparent --- Apparent ---	--- --- --- ---	--- --- --- ---	None None None None	--- --- --- ---	None None None None
68: Goldhead-----	D	Jan-Sep Oct-Dec	0.0 > 6.0	> 6.0 > 6.0	Apparent ---	0.0-1.0 ---	Long ---	Frequent None	--- ---	None None
Meadowbrook-----	D	Jan-Sep Oct-Dec	0.0 > 6.0	> 6.0 > 6.0	Apparent ---	0.0-1.0 ---	Long ---	Frequent None	--- ---	None None
69: Troup-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
70: Troup-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
71: Pits-----	---	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
72: Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
73: Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Hosford-----	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Lucy-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
74: Garcon-----	C	Jan-Mar	1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Ochlockonee-----	B	Jan-Mar	3.0-5.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	3.0-5.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Ousley-----	C	Jan-Mar	1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Apr	> 6.0	> 6.0	---	---	---	None	---	---
		May	1.5-3.0	> 6.0	Apparent	---	---	None	---	---
		Jun	> 6.0	> 6.0	---	---	---	None	---	---
		Jul-Sep	1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
75: Brantley-----	C	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Okeelala-----	B	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Lucy-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
78: Lucy-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Blanton-----	A	Jan-Mar	3.5-5.5	4.0-6.0	Perched	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-5.5	4.0-6.0	Perched	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
78: Cowarts-----	C	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
81: Scranton-----	A/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
82: Brickyard-----	D	Jan-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
Chowan-----	D	Jan-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	---
83: Plummer-----	D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Sapelo-----	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Pottsburg-----	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
91: Woodington-----	B/D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-1.0	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
92: Pamlico-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	Long	Frequent
Pickney-----	D	Jan-Sep	0.0	> 6.0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		Oct-Dec	> 6.0	> 6.0	---	---	---	---	Long	Frequent

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
95: Bibb-----	D	Jan-Mar	0.5-1.0	> 6.0	Apparent	---	---	None	Long	Occasional
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	---	
Jul-Sep		0.5-1.0	> 6.0	Apparent	---	---	None	Long	Occasional	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	---	
Rains-----	D	Jan-Mar	0.0-1.0	> 6.0	Apparent	---	---	None	Long	Occasional
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	---	
Jul-Sep		0.0-1.0	> 6.0	Apparent	---	---	None	Long	Occasional	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	---	
Garcon-----	C	Jan-Mar	1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	---	
Jul-Sep		1.5-3.0	> 6.0	Apparent	---	---	None	Brief	Occasional	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	---	
96: Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		3.5-6.0	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	
Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
97: Foxworth-----	A	Jan-Mar	3.5-6.0	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		3.5-6.0	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	
Lakeland-----	A	Jan-Dec	> 6.0	> 6.0	---	---	---	None	---	None
98: Leon, nonhydic-----	B/D	Jan-Mar	0.5-1.5	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		0.5-1.5	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	
Chipley-----	C	Jan-Mar	1.5-3.5	> 6.0	Apparent	---	---	None	---	None
Apr-Jun		> 6.0	> 6.0	---	---	---	None	---	None	
Jul-Sep		1.5-3.5	> 6.0	Apparent	---	---	None	---	None	
Oct-Dec		> 6.0	> 6.0	---	---	---	None	---	None	

Table 18.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
98: Leon, hydric-----	B/D	Jan-Mar	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	0.0-0.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
99: Water.										
101: Albany-----	C	Jan-Mar	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	1.0-3.5	> 6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None
Blanton-----	A	Jan-Mar	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Apr-Jun	> 6.0	> 6.0	---	---	---	None	---	None
		Jul-Sep	3.5-5.5	4.0-6.0	Apparent	---	---	None	---	None
		Oct-Dec	> 6.0	> 6.0	---	---	---	None	---	None

Soil Survey of Liberty County, Florida

Table 19.--Soil Features

[See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated]

Map symbol and soil name	Subsidence		Risk of corrosion	
	Initial	Total	Uncoated steel	Concrete
	<i>In</i>	<i>In</i>		
2: Albany-----	---	---	High	High
4: Alpin-----	---	---	Low	High
Foxworth-----	---	---	Low	Moderate
5: Rains-----	---	---	High	High
Bladen-----	---	---	High	High
6: Blanton-----	---	---	High	High
7: Blanton-----	---	---	High	High
8: Brickyard-----	---	---	Moderate	Moderate
9: Centenary-----	---	---	Moderate	High
11: Chipley-----	---	---	Low	High
Foxworth-----	---	---	Low	Moderate
12: Rutlege-----	---	---	High	High
Plummer-----	---	---	Moderate	High
13: Dorovan-----	6-12	51-80	High	High
Pamlico-----	4-20	10-36	High	High
14: Dothan-----	---	---	Moderate	Moderate
15: Dothan-----	---	---	Moderate	Moderate
17: Dothan-----	---	---	Moderate	Moderate
Fuquay-----	---	---	Low	High
24: Goldsboro-----	---	---	Moderate	High
25: Goldsboro-----	---	---	Moderate	High

Soil Survey of Liberty County, Florida

Table 19.--Soil Features--Continued

Map symbol and soil name	Subsidence		Risk of corrosion	
	Initial	Total	Uncoated steel	Concrete
	<i>In</i>	<i>In</i>		
26: Foxworth-----	---	---	Low	Moderate
27: Fuquay-----	---	---	Low	High
30: Elloree-----	---	---	High	Moderate
Bibb-----	---	---	High	Moderate
Meggett-----	---	---	High	Moderate
31: Hurricane-----	---	---	Low	Moderate
Chipley-----	---	---	Low	High
32: Plummer-----	---	---	Moderate	High
Pelham-----	---	---	High	High
34: Lakeland-----	---	---	Low	Moderate
35: Lakeland-----	---	---	Low	Moderate
36: Lakeland-----	---	---	Low	Moderate
37: Lakeland-----	---	---	Low	Moderate
Foxworth-----	---	---	Low	Moderate
38: Leefield-----	---	---	Moderate	High
39: Leon, nonhydric-----	---	---	High	High
Leon, hydric-----	---	---	High	High
42: Lucy-----	---	---	Low	High
44: Lynchburg-----	---	---	High	High
45: Lynn Haven-----	---	---	High	High
46: Hurricane-----	---	---	Low	Moderate
Leon-----	---	---	High	High
Albany-----	---	---	High	High

Soil Survey of Liberty County, Florida

Table 19.--Soil Features--Continued

Map symbol and soil name	Subsidence		Risk of corrosion	
	Initial	Total	Uncoated steel	Concrete
	<i>In</i>	<i>In</i>		
47:				
Torhunta-----	---	---	High	High
Lynn Haven-----	---	---	High	High
Croatan-----	4-12	10-29	High	High
48:				
Meadowbrook, nonhydic-	---	---	Moderate	High
Meadowbrook, hydric----	---	---	Moderate	High
49:				
Meadowbrook, slough----	---	---	Moderate	High
54:				
Pelham, nonhydic-----	---	---	High	High
Pelham, hydric-----	---	---	High	High
55:				
Plummer, nonhydic-----	---	---	Moderate	High
Plummer, hydric-----	---	---	Moderate	High
56:				
Pottsburg, nonhydic----	---	---	High	High
Pottsburg, hydric-----	---	---	High	High
57:				
Surrency, depressional-	---	---	High	High
Pantego, depressional--	---	---	High	High
Croatan, depressional--	4-10	18-24	High	High
58:				
Rutlege-----	---	---	High	High
Bibb-----	---	---	High	Moderate
Surrency-----	---	---	High	High
59:				
Hosford-----	---	---	High	High
60:				
Sapelo, nonhydic-----	---	---	High	High
Sapelo, hydric-----	---	---	High	High
61:				
Osier-----	---	---	High	High
62:				
Scranton, slough-----	---	---	Low	High
63:				
Stilson-----	---	---	Moderate	High

Soil Survey of Liberty County, Florida

Table 19.--Soil Features--Continued

Map symbol and soil name	Subsidence		Risk of corrosion	
	Initial	Total	Uncoated steel	Concrete
	<i>In</i>	<i>In</i>		
65: Pickney-----	---	---	High	High
Bibb-----	---	---	High	Moderate
Dorovan-----	6-12	51-80	High	High
66: Wahee-----	---	---	High	High
Ochlockonee-----	---	---	Low	High
67: Goldhead-----	---	---	High	Moderate
68: Goldhead, depressional-----	---	---	High	Moderate
Meadowbrook, depressional-----	---	---	Moderate	High
69: Troup-----	---	---	Low	Moderate
70: Troup-----	---	---	Low	Moderate
71: Pits.				
72: Lakeland-----	---	---	Low	Moderate
73: Foxworth-----	---	---	Low	Moderate
Hosford-----	---	---	High	High
Lucy-----	---	---	Low	High
74: Garcon-----	---	---	High	High
Ochlockonee-----	---	---	Low	High
Ousley-----	---	---	Low	High
75: Brantley-----	---	---	High	High
Okeelala-----	---	---	Moderate	Moderate
Lucy-----	---	---	Low	High
78: Lucy-----	---	---	Low	High
Blanton-----	---	---	High	High
Cowarts-----	---	---	Moderate	Moderate

Soil Survey of Liberty County, Florida

Table 19.--Soil Features--Continued

Map symbol and soil name	Subsidence		Risk of corrosion	
	Initial	Total	Uncoated steel	Concrete
	<i>In</i>	<i>In</i>		
81: Scranton-----	---	---	Low	High
82: Brickyard-----	---	---	Moderate	Moderate
Chowan-----	---	---	High	High
83: Plummer-----	---	---	Moderate	High
Sapelo-----	---	---	High	High
Pottsburg-----	---	---	High	High
91: Woodington-----	---	---	High	High
92: Pamlico, frequently flooded-----	4-12	10-29	High	High
Pickney, frequently flooded-----	---	---	High	High
95: Bibb-----	---	---	High	Moderate
Rains-----	---	---	High	High
Garcon-----	---	---	High	High
96: Foxworth-----	---	---	Low	Moderate
Lakeland-----	---	---	Low	Moderate
97: Foxworth-----	---	---	Low	Moderate
Lakeland-----	---	---	Low	Moderate
98: Leon, nonhydric-----	---	---	High	High
Chipley-----	---	---	Low	High
Leon, hydric-----	---	---	High	High
99: Water.				
101: Albany-----	---	---	High	High
Blanton-----	---	---	High	High

Soil Survey of Liberty County, Florida

Table 20.--Taxonomic Classification of the Soils

Soil name	Family or higher taxonomic class
Albany-----	Loamy, siliceous, subactive, thermic Aquic Arenic Paleudults
Alpin-----	Thermic, coated Lamellic Quartzipsamments
Bibb-----	Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Bladen-----	Fine, mixed, semiactive, thermic Typic Albaquults
Blanton-----	Loamy, siliceous, semiactive, thermic Grossarenic Paleudults
Brantley-----	Fine, mixed, active, thermic Ultic Hapludalfs
Brickyard-----	Fine, smectitic, nonacid, thermic Typic Endoaquepts
Centenary-----	Sandy, siliceous, thermic Entic Grossarenic Alorthods
Chipley-----	Thermic, coated Aquic Quartzipsamments
Chowan-----	Fine-silty, mixed, active, nonacid, thermic Thapto-Histic Fluvaquents
Cowarts-----	Fine-loamy, kaolinitic, thermic Typic Kanhapludults
Croatan-----	Loamy, siliceous, dysic, thermic Terric Haplosaprists
Dorovan-----	Dysic, thermic Typic Haplosaprists
Dothan-----	Fine-loamy, kaolinitic, thermic Plinthic Kandiudults
Elloree-----	Loamy, siliceous, active, thermic Arenic Endoaqualfs
Foxworth-----	Thermic, coated Typic Quartzipsamments
Fuquay-----	Loamy, kaolinitic, thermic Arenic Plinthic Kandiudults
Garcon-----	Loamy, siliceous, active, thermic Aquic Arenic Hapludults
Goldhead-----	Loamy, siliceous, active, thermic Arenic Endoaqualfs
Goldsboro-----	Fine-loamy, siliceous, subactive, thermic Aquic Paleudults
Hosford-----	Sandy, siliceous, thermic Cumulic Humaquepts
Hurricane-----	Sandy, siliceous, thermic Oxyaquic Alorthods
Lakeland-----	Thermic, coated Typic Quartzipsamments
Leefield-----	Loamy, siliceous, subactive, thermic Arenic Plinthaquic Paleudults
Leon-----	Sandy, siliceous, thermic Aeric Alaquods
Lucy-----	Loamy, kaolinitic, thermic Arenic Kandiudults
Lynchburg-----	Fine-loamy, siliceous, semiactive, thermic Aeric Paleaquults
Lynn Haven-----	Sandy, siliceous, thermic Typic Alaquods
Meadowbrook-----	Loamy, siliceous, subactive, thermic Grossarenic Endoaqualfs
Meggett-----	Fine, mixed, active, thermic Typic Albaqualfs
Ochlockonee-----	Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents
Okeelala-----	Fine-loamy, siliceous, semiactive, thermic Ultic Hapludalfs
Osier-----	Siliceous, thermic Typic Psammaquents
Ousley-----	Thermic, uncoated Aquic Quartzipsamments
Pamlico-----	Sandy or sandy-skeletal, siliceous, dysic, thermic Terric Haplosaprists
Pantego-----	Fine-loamy, siliceous, semiactive, thermic Umbric Paleaquults
Pelham-----	Loamy, siliceous, subactive, thermic Arenic Paleaquults
Pickney-----	Sandy, siliceous, thermic Cumulic Humaquepts
Plummer-----	Loamy, siliceous, subactive, thermic Grossarenic Paleaquults
Pottsburg-----	Sandy, siliceous, thermic Grossarenic Alaquods
Rains-----	Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults
Rutlege-----	Sandy, siliceous, thermic Typic Humaquepts
Sapelo-----	Sandy, siliceous, thermic Ultic Alaquods
Scranton-----	Siliceous, thermic Humaqueptic Psammaquents
Stilson-----	Loamy, siliceous, subactive, thermic Arenic Plinthic Paleudults
Surrency-----	Loamy, siliceous, semiactive, thermic Arenic Umbric Paleaquults
Torhunta-----	Coarse-loamy, siliceous, active, acid, thermic Typic Humaquepts
Troup-----	Loamy, kaolinitic, thermic Grossarenic Kandiudults
Wahee-----	Fine, mixed, semiactive, thermic Aeric Endoaquults
Woodington-----	Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults

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